## => d his full

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(FILE 'HOME' ENTE D AT 09:54:00 ON 10 MAY 2006
L numbers L1-L25 are f search of a different appl. ation. They are not applicat
here.
     FILE 'STNGUIDE' E 'ERED AT 10:38:20 ON 10 MAY : )6
     FILE 'CAPLUS' ENT
                        ED AT 10:59:46 ON 10 MAY 200
                E US20
                        -432359/APPS
              1 SEA AB. ON PLU=ON US2002-432359P/I N
L26
                D SCA
                SEL RN
     FILE 'REGISTRY' E 'ERED AT 11:00:46 ON 10 MAY : 36
              5 SEA AB ON PLU=ON (110-89-4/BI OR 7043-39-6/BI OR 288-32-4/B
L27
                I OR 7 925-38-8/BI OR 98-92-0/BI)
                D SCA
     FILE 'CAPLUS' ENT. ED AT 11:01:58 ON 10 MAY 20(
                D L26
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     FILE 'STNGUIDE' E ERED AT 11:03:13 ON 10 MAY 1 06
     FILE 'REGISTRY' E: ERED AT 11:03:58 ON 10 MAY 1 06
        1623130 SEA AB: ON PLU=ON NCNC2/ESS
L28
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L*** DEL
L29
         989235 SEA AB
                        ON PLU=ON NC2NC2/ESS
          73029 SEA AB: ON PLU=ON L28 AND L29
L30
          40839 SEA AB: ON PLU=ON L30 AND NRRS=2
L31
          19146 SEA AB: ON PLU=ON L28 (S) L29
L32
                E "IMI. ZO(1,2-A)PYRAZIN-3-AMINE, N· 1,1-DIMETHYLETHYL)-2-(5-((
              1 SEA AB ON PLU=ON "IMIDAZO(1,2-A)! RAZIN-3-AMINE, N-(1,1-DIME THYLET L)-2-(5-((3-(METHYLAMINO)PH (L)ETHYNYL)-2-THIENYL)-"/C
L33
                N
                D SCA
                D RSD
           1794 SEA AB: ON PLU=ON 333.871.5/RID
L34
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L35
            221 SEA AB: ON PLU=ON L34
L36
         520762 SEA AB: ON
                            PLU=ON
                                    ?NEURO?/BI
                           PLU=ON L35 AND L36
L37
             13 SEA AB! ON
                            PLU=ON ALZHEIMER?/BI
L38
          39352 SEA AB: ON
                            PLU=ON SCHIZO?/BI
L39
          28450 SEA AB: ON
                            PLU=ON
L40
              O SEA AB! ON
                                    "MENTAL AND BEHA [ORAL DISORDER"/CT
                            PLU=ON "MENTAL AND BEHA [ORAL DISORDERS"/CT
L41
          15699 SEA AB: ON
                            PLU=ON DEMENT?/BI
L42
          12834 SEA AB: ON
                            PLU=ON NEUROGEN?/OBI OF VEURO GEN?/OBI
L43
           7220 SEA AB: ON
L44
          10303 SEA AB: ON PLU=ON
                                    ?PSYCHIAT?/BI
L*** DEL
              2 S L35 / ID (L36 AND L38-L44)
L45
             22 SEA AB; ON PLU=ON L35 AND (L36 OR L38 OR L39 OR L40 OR L41
                OR L42 )R L43 OR L44))
L46
            184 SEA AB: ON PLU=ON KELLEHER J?/AU
L47
              O SEA ABI ON
                            PLU=ON
                                    JOHE K/?AU
L48
             16 SEA AB! ON
                            PLU=ON
                                     JOHE K?/AU
L49
              O SEA AB!
                        ON
                            PLU=ON
                                    L46 AND L48
L50
           1323 SEA AB:
                        ON
                            PLU=ON
                                    KELLEHER?/AU
L51
              1 SEA AB: ON
                            PLU=ON L50 AND L48
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D SCA
             O SEA ABB=ON PLU N (L50 OR L48) AND L35
\Gamma_i
            20 SEA ABB=ON PLU N (L50 OR L48) AND ((L38 O; .39 OR L40 OR
\Gamma_{c}
               L41 OR L42 OR L OR L44))
            20 SEA ABB=ON PLU N L53 OR L51
L^{\epsilon}
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              D QUE L51
               D QUE L53
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               D IBIB ABS HITI
                              L55 1-20
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               D STAT QUE L37
               D STAT QUE L45
            22 SEA ABB=ON PLU N L37 OR L45
L5
            22 SEA ABB=ON PLU N L56 NOT L55
L5
               D IBIB ABS HITI! HITSTR L57 1-22
    FILE HOME
    FILE REGISTRY
    Property values tagged wit. IC are from the ZIC/VINITI c :a file
    provided by InfoChem.
                               MAY 2006 HIGHEST RN 88363: 57-0
    STRUCTURE FILE UPDATES:
    DICTIONARY FILE UPDATES:
                              MAY 2006 HIGHEST RN 88363: 57-0
    New CAS Information Use Po cies, enter HELP USAGETERMS or details.
    TSCA INFORMATION NOW CURRE: THROUGH January 6, 2006
      Please note that search- rm pricing does apply when
      conducting SmartSELECT s. rches.
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     * The CA roles and documen type information have been 1 noved from *
     * the IDE default display rmat and the ED field has be 1 added,
     * effective March 20, 2005 A new display format, IDERI is now
     * available and contains to CA role and document type i formation. *
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    for details.
    REGISTRY includes numerica y searchable data for experiental and
    predicted properties as we as tags indicating availability of
    experimental property data n the original document. For information
    on property searching in Ri ISTRY, refer to:
    http://www.cas.org/ONLINE/i /regprops.html
    FILE CAPLUS
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Search i by John DiNatale x2-2557

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Effective October 1' 2005, revised CAS Informati . Use Policies apply.

They are available 'r your review at:

http://www.cas.org/ fopolicy.html

FILE STNGUIDE

FILE CONTAINS CURRE INFORMATION.

LAST RELOADED: May , 2006 (20060505/UP).

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=> file ciplus
FILE 'CAP JUS' ENTERED AT 11:20:34 ON 10 MAY 2006
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FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20 FILE LAST UPDATED: 9 May 2006 (20060509/ED)

Effective October 17, 2005, revised CAS Information Use Policies app.y. They are available for your review at:

http://www.cas.org/infopolicy.html
'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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=> d que J51
L48 16 SEA FILE=CAPLUS ABB=ON PLU=ON JOHE K?/AU
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L51 1 SEA FILE=CAPLUS ABB=ON PLU=ON L50 AND L48
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L38
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          28450 SEA FILE=CAPLUS ABB=ON PLU=ON SCHIZO?/BI
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L40
                 DISORDER"/CT
          15699 SEA FILE=CAPLUS ABB=ON PLU=ON "MENTAL AND BEHAVIORAL
L41
                 DISORDERS"/CT
          12834 SEA FILE=CAPLUS ABB=ON PLU=ON DEMENT?/BI
L42
           7220 SEA FILE=CAPLUS ABB=ON PLU=ON NEUROGEN?/OBI OR NEURO
L43
                 GEN?/OBI
          10303 SEA FILE=CAPLUS ABB=ON PLU=ON ?PSYCHIAT?/BI
L44
             16 SEA FILE=CAPLUS ABB=ON PLU=ON JOHE K?/AU
L48
           1323 SEA FILE=CAPLUS ABB=ON PLU=ON KELLEHER?/AU
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L50
1.53
                 OR L40 OR L41 OR L42 OR L43 OR L44))
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=> s L51 or L53
L55 20 L51 OR L53
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AUTHOR (S):

=> d ibib abs hitind L55 1-20

L55 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:242452 CAPLUS

DOCUMENT NUMBER: 144:246387

TITLE: Discovery of neurogenic, Alzheimer

's disease therapeutics Kelleher-Andersson, Judith CORPORATE SOURCE: Dept. Neurobiology, Neuronascent, Inc., Clarksville,

MD, 21029, USA

SOURCE: Current Alzheimer Research (2006), 3(1), 55-62

CODEN: CARUBY; ISSN: 1567-2050 Bentham Science Publishers Ltd.

PUBLISHER: Bentham Science Publisher
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Many researchers have questioned whether new potential therapies aim:d at reversing Alzheimer's disease (AD) are indeed scientificall / feasible. A number of approved therapies already exist for Alzheimer's d.sease, yet these drugs only slow the disease progression for a period of time and treat the symptoms of this devastating disease. New therapies intended to reverse the disease would necessarily need to replace dead, dying, and dysfunctional neurons in affected regions of the brain. This complex drug discovery problem is further complicated by the knowledge that AD is mainly an aging disorder and that aging, though not considered a disease, causes biol. changes that may also need to be overcome. The requirement for new, functional neurons under neurodegenerative diseases, as seen in AD and stroke, suggests that an inhibitor of neuronal death, like Memantine, is insufficient to reverse the cognitive and phys. loss. New neurons, or neurogenesis, may be required for real improvement or reversal of the cognitive deficit. Adult neurogenesis, first described by Altman in the early 1960s, has more recently been observed as a response to injury or disease. Of interest was the finding that new neurons appear to migrate to disease/injury-affected areas in the prain not normally neurogenic in the adult. This pathol.-stimu.ation of neurogenesis does not appear sufficient to stave off the disease and subsequent behavioral decline. Therefore, the desire to amplify and improve upon the neurogenesis-response to neurodegenerative disease appears warranted, if not yet feasible. The key to doing so lies in identifying what signals are required to promote neurogenesis and neuron survival, either in injury and disease or under environmental stimuli. This could provide clues for how to pharmacol. induce neurogenesis inder neurodegenerative conditions. Currently, progress in identifying therapeutics that appear to promote ameliorative neurogenesis for AD is lagging behind the pharmacol. induction of neurogenesis as a therapy for depression.

CC 1-0 (Pharmaco.ogy)

Section cross reference(s): 14

ST review neurogenic Alzheimer disease therapeutics drug discovery

IT Nerve, disease

Nervous system, disease

(degeneration; discovery of neurogenic and Alzheimer's disease therapeutics)

IT Alzheimer's disease

Drug discovery

Neurogenesis

Signal transduction, biological

Therapy

REFERENCE COUNT:

(discovery of neurogenic and Alzheimer's disease

therapeutics)

RECORD. ALL

THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

83

ACCESSION NUMBER: 2005:247717 CAPLUS

DOCUMENT NUMBER: 143:303220

TITLE: Neurogenesis as a potential therapeutic strategy for neurodegenerative disorders

AUTHOR(S): Kelleher-Andersson, J.

CORPORATE SOURCE: Neuronascent, Inc., Clarksville, MD, USA

SOURCE: Journal of Alzheimer's Disease (2004), 6(6, Suppl.),

S19-S25

CODEN: JADIF9; 1SSN: 1387-2877

PUBLISHER: IOS Press

DOCUMENT TY'E: Journal; General Review

LANGUAGE: English

AB A review. A review describes the potential of neurogenesis as a therapeutic strategy for neurodegenerative disorders. Great developments have been made in the field of adult neurogenesis, the goal of small mole therapeutic that both increases the generation of nascent neurons and inhibits the region-specific neuronal loss, may still be years away. However, an agent that enhances all stages of neurogenesis, might not only halt the steep cognitive decline observed in Alzheimer's disease patients but might perhaps even reverse the disease outcome. Dual function, small mole agents provide one promising source for such therapeutics.

CC 14-0 (Mammalian Pathological Biochemistry)

Section cross-reference(s): 1

ST review neurogenesis neurodegenerative disorder Alzheimer

's disease

IT Nervous system, disease

(degeneration; small mol. agents provide promising source for enhancing all stages of neurogenesis that might not only halt steep cognitive decline observed in Alzheimer's disease patients but might even reverse disease outcome)

IT Alzheimer's disease

Brain

Drug targets

Human

## Neurogenesis

(small mol. agents provide promising source for enhancing all stages of neurogenesis that might not only nalt steep cognitive decline observed in Alzheimer's disease patients but might even reverse disease outcome)

REFERENCE COUNT:

AUTHOR (S):

65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:60631 CAPLUS

DOCUMENT NU! BER: 142:256470

TITLE: Human protection of telomeres 1 (POT1) is a negative

regulator of telomerase activity in vitro Kelleher, Colleen; Kurth, Isabel; Lingner,

Joachim

CORPORATE SOURCE: Swiss Institute for Experimental Cancer Research,

Epalinges, Switz.

SOURCE: Molecular and Cellular Biology (2005), 25(2), 808-818

CODEN: MCEBD4; ISSN: 0270-7306

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal LANGUAGE: English

AB The telomeric single-strand DNA binding protein protection of telomeres 1

(POT1) protects telomeres from rapid degradation in

Schizosaccharomyces pombe and has been implicated in pos. and neg. telomere length regulation in humans. Human POT1 appears to interact with telomeres both through direct binding to the 3' overhanging G-strand DNA and through interaction with the TRF1 duplex telomere DNA binding complex. The influence of POT1 on telomerase activity has not been studied at the

mol. level. We show here that POT1 neg. effects telomerase activity in vitro. We find that the DNA binding activity of POT1 is required for telomerase inhibition. Furthermore, POT1 is incapable of inhibiting telomeric repeat addition to substrate primer; that are defective for POT1 binding, suggesting that in vivo, POT1 likely affects substrate access to telomerase.

CC 6-3 (General Bicchemistry)
 Section cross-reference(s): 7

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1007457 CAPLUS

DOCUMENT NUMBER: 142:273810

TITLE: Recognition of a dopamine replacement therapy

dependence syndrome in Parkinson's disease: a pilot

study

AUTHOR(S): Bearn, Jennifer; Evans, Andrew; Kelleher,

Michael; Turner, Kirsten; Lees, Andrew
CORPORATE SOURCE: National Addiction Centre, Institute of Psychiatry,

London, SE58AF, UK

SOURCE: Drug and Alcohol Dependence (2004), 76(3), 305-310

CODEN: DADEDV; ISSN: 0376 8716

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

Patients with Parkinson's disease may use Dopamine Replacement Therapy (DRT) in excess of therapeutic need. We investigate whether a group of 10 patients with Parkinson's disease, provisionally diagnosed with "Hedonistic Homeostatic Dysregulation" because of their excessive use of DRT, met established operational psychiatric criteria for substance dependence, compared with 10 patients with Parkinson's disease compliant with prescribed DRT. Using a semi-structured questionnaire designed to distinguish between adaptive therapeutic dependence on DRT and a maladaptive pathol. pattern of DRT use, in conjunction with the SCID-1, we found that seven of the patients deemed by their treating physicians to be misusing DRT fulfilled operational criteria for maladaptive dependence in contrast to none of the compliant group. The majority experienced dysphoric "withcrawal" symptoms in the "off" state and increased their dose of DRT in an effort to control their mood. They also continued to use high doses of DRT despite disabling dyskinesias and social difficulties. This study provides preliminary evidence that some patients with Parkinson's disease may become maladaptively dependent on DRT. This finding has both clin. relevance for the treatment of PD and further implicates dopaminergic pathways in the genesis of substance dependence.

CC 1-11 (Pharmacology)

Section cross-reference(s): 2

## IT Mental and behavioral disorders

(depression; Parkinson's disease patient with HHD due to DRT showed long duration of disease, high dyskinesia, anxiety, dysphoric withdrawal symptoms resulting in more use of DRT indicating maladaptive therapy dependence than those compliant to DRT)

## IT Mental and behavioral disorders

(psychosis; Farkinson's disease patient with HHD due to DRT showed long duration of cisease, high dyskinesia, anxiety, dysphoric withdrawal symptoms resulting in more use of DRT indicating maladaptive therapy dependence than those compliant to DRT)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L55 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUM! ER:
                       2004:515647 CAPLU;
DOCUMENT NUMBIR:
                        141:47365
TITLE:
                        Method for discovering neurogenic agents
INVENTOR(S):
                        Kelleher-Andersson, Judith; Johe, Karl
                        K.
PATENT ASSIGN! E(S):
                        Johe, Karl, K., US \
                        PCT Int. Appl., 57 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE
                        Patent
LANGUAGE:
                        English
FAMILY ACC. N.M. COUNT: 1
PATENT INFORMATION:
                   KIND DATE
                                         APPLICATION NO. DATE
    PATENT NO.
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                                                                _____
                                         WO 2003-US38670
    WO 20040: 3071
                       A2
                              20040624
                                                                20031205
                       A3
    WO 20040: 3071
                              20060330
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            (O, CR, CU, CZ, DE, DK, DM, DZ EC, EE, ES, FI, GB, GD, GE, GH,
            (M, HR, HU, ID, IL, IN, IS, JP KE, KG, KP, KR, KZ, LC, LK, LR,
            I.S, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            FG, PH, PL, PT, RO, RU, SC, SD SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC VN, YU, ZA, ZM, ZW
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            IS, FI, FR, GB, GR, HU, IE, IT LU, MC, NL, PT, RO, SE, SI, SK,
            "R, BF, BJ, CF, CG, CI, CM, GA. GN, GQ, GW, ML, MR, NE, SN, TD, TG
                              20040923 US 2003-728652
    US 20041 5429
                        A1
                                                                20031205
                                         EP 2003-790356
    EP 15761:4
                               20050921
                        A2
                                                                20031205
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                                          US 2002-432359P P 20021209
PRIORITY APPLL. INFO.:
                                          US 2003-493674P
                                                             P 20030808
                                                            W 20031205
                                          WO 2003-US38670
OTHER SOURCE(:):
                       MARPAT 141:47365
    A method for discovering neurogenic drugs is disclosed. The method allows
    for systematic screening of test agent; such as libraries of compds. The
    method consists of exposing test agent; to cultures of differentiating
    neural progenitor cells and measuring their effects on increasing the
    overall (ell number and/or the number of neurons.
    ICM C12N
TC
    1-11 (Pharmacology)
CC
ST
    neurogenic agent screening neurodegene ative
    neuropsychiatric disease stem cell
TΤ
    Cognitive disorders
        (aged-related; method for discovering neurogenic agents)
IT
    Nervous :ystem, disease
        (amyot rophic lateral sclerosis; met nod for discovering
       neurogenic agents)
IT
    Nervous :ystem, disease
        (degeneration; method for discovering neurogenic agents)
IT
    Mental and behavioral disorders
        (dementia; method for discovering neurogenic
       agents)
IT
    Central rervous system, disease
        (demyelination; method for discovering neurogenic agents)
IT
    Mental and behavioral disorders
        (depression; method for discovering neurogenic agents)
IT
    Sleep
```

```
(deprivation; method for discovering neurogenic agents)
     Brain
IT
        (hippocampus; method for discovering neurogenic agents)
     Spinal column, disease
IT
        (injury; method for discovering neurogenic acents)
     Aging, animal
ΙT
       Alzheimer's disease
     Amnesia
     Analysis
     Animal tissue culture
     Anxiety
     Brain
     Cell differentiation
     Central nervous system
     Chemical library
     Cognition enhancers
     Cognitive disorders
     Drug screening
     Human
       Mental and behavioral disorders
     Multiple sclerosis
     Nervous system agents
       Neurogenesis
     Neuroglia
     Neuron
     Parkinson's disease
       Schizophrenia
        (method for discovering neurogenic agents)
ΙT
     Stem cell
        (neural; method for discovering neurogenic agents)
IT
        (neuropathic; method for discovering neurogenic agents)
ΙT
     Stress, animal
        (post-traumatic syndrome; method for discovering neurogenic
        agents)
IT
     Culture media
        (serum-free, mitogen-free; method for discovering neurogenic
        agents)
IT
     Brain, disease
        (stroke; method for discovering neurogenic agents)
TT
     Brain
        (subventricular zone; method for discovering neurogenic
        agents)
ΙT
     Injury
        (trauma; method for discovering neurogenic acents)
     98-92-0, Nicotinamide
IT
                             110-89-4D, Piperidine, aryloxy derivs.
                                                                        288-32-4,
     Imidazole, biological studies 27043-39-6, Amir opyrimidine
     705925-38-8D, derivs.
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (method for discovering neurogenic agents)
L55 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:368361 CAPLUS
DOCUMENT NUMBER:
                         140:355106
TITLE:
                         Loss of presenilin function causes impairments of
                         memory and synaptic plasticity followed by
                         age-dependent neurodegeneration
AUTHOR (S):
                         Saura, Carlos A.; Choi, Se-loung; Beglopoulos,
                         Vassilios; Malkani, Seema; [hang, Dawei; Rao, B. S.
```

Shankaranarayana; Chattarji, Sumantra; Kelleher, Raymond J., III; Kandel, Eric R.; Duff, Karen;

Kirkwood, Alfredo; Shen, Jie

CORPORATE SOURCE:

SOURCE:

Center for Neurologic Diseases, Brigham and Women's Hospital, Program in Neuroscience, Harvard Medical

School, Boston, MA, (2115, USA Neuron (2004), 42(1), 23-36

CODEN: NERNET; ISSN: 0896-6273

PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English

- AB Mutations in presentilins are the major cause of familial Alzheimer 's disease, but the pathogenic mechanism by which presentilin mutations cause memory loss and neurodegeneration remains unclear. Here the authors demonstrate that conditional double knockout mice lacking both presentilins in the postnatal forebrain exhibit impairments in hippocampal memory and synaptic plasticity. These deficits are associated with specific redns. in NMDA receptor-mediated responses and synaptic levels of NMDA receptors and αCaMKII. Furthermore, loss of presentilins causes reduced expression of CBP and CREB/CBP target genes, such as c-fos and BDNF. With increasing age, mutant mice develop striking neurodegeneration of the cerebral cortex and worsening impairments of memory and synaptic function.

  Neurodegeneration is accompanied by increased levels of the Cdk5 activator p25 and hyperphosphorylated tau. These results define essential roles and mol. targets of presentilins in synaptic plasticity, learning and memory, and neuronal survival in the adult cerebral cortex.
- CC 14-10 (Mammalian Pathological Biochemistry)
- ST presentiin memory synaptic plasticity impairment age dependent neurodegeneration Alzheimer
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (14-3-30; loss of presentilin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and CBP and CREB/CBP-dependent gene expression)
- IT Presenilins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (1; loss of presential function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease)
- IT Presenilins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (2; loss of presentiin function causes impairments of hippocampal
    memory and synaptic plasticity followed by age-dependent
    neurodegeneration in relation to familial Alzheimer's
    disease)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (CBP (CREB-binding protein); loss of presentilin function causes
    impairments of hippocampal memory and synaptic plasticity followed by
    age-dependent neurodegeneration in relation to familial
    Alzheimer's disease and CBP and CREB/CBP-dependent gene
    expression)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (CREB (cAMP-responsive element-binding); loss of presentilin function
    causes impairments of hippocampal memory and synaptic plasticity
    followed by age-dependent neurodegeneration in relation to familial
    Alzheimer's disease and CBP and CREB/CBP-dependent gene

expression)

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (B ological study)
    (Cdk5 activator protein p35; loss of presentil: function causes
    impairments of hippocampal memory and synaptic plasticity followed by
    age-dependent neurodegeneration in relation to familial
    Alzheimer's disease and)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (B ological study)
    (Egr-1; loss of presentiin function causes impriments of hippocampal
    memory and synaptic plasticity followed by age dependent
    neurodegeneration in relation to familial Alzheimer's disease
    and CBP and CREB/CBP-dependent gene expression
- IT Glutamate receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (NMDA-binding; loss of presentilin function causes impairments of hippocampal memor, and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and)
- IT Neurotrophic factors
  - RL: BSU (Biological study, unclassified); BIOL (B.ological study) (brain-derived; loss of presentilin function causes impairments of hippocampal memor, and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and CBP and CREB/CBP-dependent gene expression)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (c-fos; loss of presentiin function causes impriments of hippocampal
    memory and synaptic plasticity followed by age dependent
    neurodegeneration in relation to familial Alzheimer's disease
    and CBP and CREB/IBP-dependent gene expression)
- IT Brain, disease
  - (degeneration, cerebral cortex and hippocampus, loss of presenilin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegereration in relation to familial Alzheimer's disease)
- IT Alzheimer's disease
  - (familial; loss of presentlin function causes impairments of hippocampal memor/ and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease)
- IT Brain
  - (hippocampus; loss of presenilin function causes impairments of hippocampal memor, and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease)
- IT Tau factor
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (hyperphosphorylated; loss of presentilin function causes impairments of hippocampal memor/ and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and)
- IT Phosphorylation, biological
  - (hyperphosphorylation, tau; loss of presentilin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and)
- IT Synaptic plasticity
  - (impairment; loss of presentilin function causes impairments of hippocampal memor/ and synaptic plasticity followed by age-dependent

neurodegeneration in relation to familial Alzheimer's disease)

TТ Aging, animal

Development, nammalian postnatal

Memory disorders

(loss of presentlin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease)

Transcription, genetic IT

(loss of presentlin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and CBP and CREB/CBP-dependent gene expression)

Gene, animal TT Neurofibromin

mRNA

RL: BSU (Biological study, unclassified); BIOL (Biological study) (loss of presentlin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and CBP and CREB/CBP-dependent gene expression)

TT Proteins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (synapsin [; loss of presenilin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and CBP and CREB/CBP-dependent gene expression)

TT 475489-73-7, Calcium/calmodulin-dependent protein kinase II RL: BSU (Biological study, unclassified); BIOL (Biological study) (a; loss of presentlin function causes impairments of hippocampal memory and synaptic plasticity followed by age-dependent neurodegeneration in relation to familial Alzheimer's disease and)

REFERENCE COUNT:

53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 7 OF 2) CAPLUS COPYRIGHT 2006 ACS on STN

2003:934393 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

CORPORATE SOURCE:

139:391229

TITLE:

Oxcarbazepine: clinical experience with hospitalized

psychiatric patients

AUTHOR (S):

Centorrino, Franca; Albert, Matthew J.; Berry, Judita

M.; Kelleher, James P.; Fellman, Veronica; Line, Gyorgy; Koukopoulos, Alexia E.; Kidwell,

Jennifer E.; Fogarty, Kate V.; Baldessarini, Ross J. Consolidated Department of Psychiatry, Harvard Medical

School, Boston, MA, USA

SOURCE: Bipolar Disorders (2003), 5(5), 370-374

CODEN: BDIIAU; ISSN: 1398-5647

PUBLISHER:

Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Oxcarbazepine (10-keto-carbamazepine) appears to be better tolerated and simpler to use than carbamazepine. It has antimanic, effects but, as its potential clin. usefulness and tolerability in broad samples of psychiatric patients remain to be tested, we reviewed both the pharmacol. of oxcarbazepine and our early experience with this new agent among psychiatric inpatients. We reviewed medical records of all inpatients given oxcarbazepine in the first 15 mo of its use at McLean Hospital. Data analyzed included dosing, presenting illnesses, other

medications, clin. changes, and adverse effects. Occarbazepine was given to 56 inpatients (1.3% of admissions; 31 women, 25 en) presenting with depression (n = 23), mania (n = 19), or psychosis (. = 14). The discharge daily dose for the 43 patients (76%) taking oxcarba epine was 831 mg/day, 34% higher in men than women, and fell by 9 mg/yr-o -age. Oxcarbazepine was the only putative mood-stabilizing agent given to discharge in 19 of 43 cases (44%). It was discontinued in 20% of patients for apparent inefficacy, and 4% for adverse effects. Changes in CGI and GAF scores were similarly high across illnesses, and unrelated to days of use of oxcarbazepine or its dose. Oxcarbazepine was well colerated and simpler to use clin. than its precursor carbamazepine. This agent should be studied in controlled trials to test its efficacy is specific types of major psychiatric disorders, and particularly for long-term maintenance treatment in bipolar disorder.

CC 1-11 (Pharmacology)

IT Mental and behavioral disorders

(bipolar disorder; excarbazepine in psychiatric | atients)

IT Mental and behavioral disorders

(depression; oxcarbazepine in psychiatric patien: s)

IT Human

Psychotropics

(oxcarbazepine in psychiatric patients)

IT Mental and behavioral disorders

(psychosis; oxcarbazepine in psychiatric patient:)

IT 28721-07-5, Oxcarbazepine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(oxcarbazepine in psychiatric patients)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 20)2:419712 CAPLUS

DOCUMENT NUMBER: 137:27724

TITLE: Ad ances in atypical antipsychotics for the treatment

of schizophrenia. New formulations and new

agents

AUTHOR(S): Kelleher, James P.; Centorrino, Franca;

Alpert, Matthew J.; Baldessarin, Ross J.

CORPORATE SOURCE: Department of Psychiatry, Harvaid Medical School,

Boston, MA, USA

SOURCE: CN3 Drugs (2002), 16(4), 249-26

CODEN: CNDREF; ISSN: 1172-7047

PUBLISHER: Adis International Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

As review. Innovation in atypical antipsychotic agents continues with new prepns. of available drugs as well as novel agents. In this article, we provide an update on these novel products by reviewing information from a computerized literature search, recent abstrs. and discussions with industry representatives. A generic formulation of clozapine is now available. It may be less well absorbed and/or less effective than Clozaril, although evidence is conflicting. A fatty acid amide derivative of clozapine is in early development. A liquid formulation of risperidone is currently available, which may be a useful treatment for psychotic agitation as well as a preferable alternative to tablets for some patients. A depot formulation is in development for the long-term management of psychosis. An orally disintegrating tablet formulation of olanzepine is a useful alternative to standard tablets. A short-acting injectable formulation of the drug is in development for psychotic

agitation. Sacrets and slow-release formulations of quetiapine are in development. Ziprasidone, a recently launched agent, is available in tablet form for schizophrenia/schizoaffective disorder, psychotic depression and mania. A short-acting injectable formulation is in development for psychotic agitation. Aripiprazole (tablets) and itoperidone (tablets and depot injection) are two antipsychotics in development for schizophrenia/schizoaffective disorder (available information regarding iloperidone is very limited). These new formulations and agents should broaden options for the treatment of psychosis.

CC 1-0 (Pharmacology)

ST review atypical antipsychotic schizophrenia

IT Antipsychotics

Human

Schizophrenia

(advances in atypical antipsychotics for treatment of

schizophrenia)

REFERENCE COUNT:

58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:411993 CAPLUS

DOCUMENT NUMBER:

138:65824

TITLE:
AUTHOR(S):

Nitrones as neuroprotectants and antiaging drugs Floyd, Robert A.; Hensley, Kenneth; Forster, Michael

J.; Kelleher-Anderson, Judith A.; Wood, Paul

т .

CORPORATE SOURCE:

Free Radical Biology and Aging Research Program, Oklahoma Medical Research Foundation, Oklahoma City,

OK, 73104, USA

SOURCE:

PUBLISHER:

Annals of the New York Academy of Sciences (2002),

959 (Increasing Health Life Span), 321-329

CODEN: ANYAA9; ISSN: 0077-8923 New York Academy of Sciences

DOCUMENT TYPE: Journal; General Review

LANGUAGE:

English

A review. Specific nitrones have been used for more than 30 yr in anal. chemical and biochem. to trap and stabilize free radicals for the purpose of their identification and characterization. PBN (α-phenyl-tert-Bu nitrone), one of the more widely used nitrones for this purpose, has been shown to have potent pharmacol. activities in models of a number of aging-related diseases, most notably the neurodegenerative diseases of stroke and Alzheimer's disease. Studies in cell and animal models strongly suggest that PBN has potent antiaging activity. A novel nitrone, CPI-1429, has been shown to extend the life span of mice when administration was started in older animals. It has also shown efficacy in the prevention of memory dysfunction associated with normal aging in a mouse model. Mechanistic studies have shown that the neuroprotective activity of nitrones is not due to mass-action free radical-trapping activity, but due to cessation of enhanced signal transduction processes associated with neuro-inflammatory processes known to be enhanced in several neurodegenerative conditions. Enhanced neuroinflammatory processes produce higher levels of neurotoxins, which cause death or dysfunction of Therefore, quelling of these processes is considered to have a beneficial effect allowing proper neuronal functioning. The possible antiaging activaty of nitrones may reside in their ability to quell enhanced production of reactive oxygen species associated with age-related conditions. On the basis of novel ideas about the action of secretory products formed by senescent cells on bystander cells, it is postulated that nitrones will mitigate these processes and that this may be the

mechanism of their antiaging activity.

CC 1-0 (Pharmacology)

ST review nitrone neuroprotectant antiaging memory longe ity

Alzheimer stroke neurodegenerative

IT Aging, animal

Alzheimer's disease

Longevity

PUBLISHER:

Memory, biological

(nitrones as neuroprotectants and antiaging drugs)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:179318 CAPLUS

DOCUMENT NUMBER: 134:299982

TITLE: Analysis of a managed psychiatric disability

program

AUTHOR(S): McCulloch, Joyce; Ozminkowski, Ronald J.; Cuffel,

Brian; Dunn, Rodney L.; Goldman, William;

Kelleher, Dolores; Comporato, Andrea

CORPORATE SOURCE: Behavioral Health Sciences, The MEDSTAT Group, Inc.

San Francisco, USA

SOURCE: Journal of Occupational and Environmental Medicine

(2001), 43(2), 101-109

CODEN: JOEMFM; ISSN: 1076-2752 Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal LANGUAGE: English

AB The cost of mental illness to employers has been well documented; however,

efforts to effectively reduce the costs of psychiatric

disability are adversely affected by the fragmentation of health care services. This report is a case study of a program in which a managed

behavioral health care organization managed the psychiatric

disability of a telecommunications company. Compared with a non-random

cohort of claimants not managed under the pilot, the duration of disability was reduced by 23% (17.1 days). Patient and provider satisfaction with the program was high. This study illustrates the potential for effectively reducing the cost of psychiatric

potential for effectively reducing the cost of **psychiatric** disability and the challenges in coordinating health care.

CC 59-5 (Air Pollution and Industrial Hygiene)

ST psychiatric disability occupational health

IT Mental disorder Occupational health

(anal. of managed psychiatric disability program)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:351555 CAPLUS

DOCUMENT NUMBER: 133:3721

TITLE: The CXC chemokine H174 and methods for preventing

damage to the nervous system

INVENTOR(S): Jacobs, Kenneth; McCoy, John M.; Lavallie, Edward R.;

Collins-Racie, Lisa A.; Lu, Zhijian; Mi, Sha; Kelleher, Kerry; Carlin-Duckett, Mckeough;

Dorf, Martin E.

PATENT ASSIGNEE(S): Genetics Institute, Inc., USA; President and Fellows

of Harvard College

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT

PATENT INFORMATION:

| PA'     | TENT 1 | NO.  |      |      | KINI | <b>)</b> | DATE |      | i   | APPL  | ICA  | ION I | . 01 |     | D   | ATE  |     |
|---------|--------|------|------|------|------|----------|------|------|-----|-------|------|-------|------|-----|-----|------|-----|
|         |        |      |      |      |      | -        |      |      |     |       |      |       |      |     | -   |      |     |
| WO      | 2000   | 0294 | 39   |      | A1   |          | 2000 | 0525 | Ī   | NO 1  | 999  | US27  | 199  |     | 1:  | 9991 | 116 |
|         | W:     | ΑE,  | AL,  | AI1, | ΑT,  | AU,      | ΑZ,  | BA,  | BB, | BG,   | BR,  | BY,   | CA,  | CH, | CN, | CR,  | CU, |
|         |        | CZ,  | DE,  | DK,  | DM,  | EE,      | ES,  | FI,  | GB, | GD,   | GE,  | GH,   | GM,  | HR, | HU, | ID,  | IL, |
|         |        | IN,  | IS,  | JP,  | KE,  | KG,      | ΚP,  | KR,  | ΚZ, | LC,   | LK,  | LR,   | LS,  | LT, | LU, | LV,  | MA, |
|         |        | MD,  | MG,  | MK,  | MN,  | MW,      | MX,  | NO,  | NΖ, | PL,   | PT,  | RO,   | RU,  | SD, | SE, | SG,  | SI, |
|         |        | SK,  | SL,  | ΤJ,  | TM,  | TR,      | TT,  | TZ,  | UA, | UG,   | UZ,  | VN,   | YU,  | ZA, | ZW, | AM,  | ΑZ, |
|         |        | BY,  | KG,  | Κ∷,  | MD,  | RU,      | TJ,  | TM   |     |       |      |       |      |     |     |      |     |
|         | RW:    | GH,  | GM,  | KE,  | LS,  | MW,      | SD,  | SL,  | SZ, | TZ,   | ŪĠ,  | ZW,   | AT,  | BE, | CH, | CY,  | DE, |
|         |        | DK,  | ES,  | Fī,  | FR,  | GB,      | GR,  | ΙE,  | IT, | LU,   | MC,  | NL,   | PT,  | SE, | BF, | ВJ,  | CF, |
|         |        | CG,  | CI,  | CM,  | GA,  | GN,      | GW,  | ML,  | MR, | NE,   | SN,  | TD,   | TG   |     |     |      |     |
| CA      | 2351   | 146  |      |      | AA   |          | 2000 | 0525 | (   | CA 1  | 999- | 2351  | 146  |     | 1:  | 9991 | 116 |
| EP      | 1133   | 521  |      |      | A1   |          | 2001 | 0919 | ]   | EP 1: | 999. | 9604  | 80   |     | 1:  | 9991 | 116 |
|         | R:     | AT,  | BE,  | CH,  | DE,  | DK,      | ES,  | FR,  | GB, | GR,   | IT,  | LI,   | LU,  | NL, | SE, | MC,  | PT, |
|         |        | ΙE,  | SI,  | LT,  | LV,  | FI,      | RO   |      |     |       |      |       |      |     |     |      |     |
| PRIORIT | Y APP  | LN.  | INFO | . :  |      |          |      |      | 1   | JS 1  | 998  | 1930  | 92   | Ĭ   | A 1 | 9981 | 116 |
|         |        |      |      |      |      |          |      |      | 1   | WO 1  | 999. | US27  | 199  | . 1 | W 1 | 9991 | 116 |

This invention provides polynucleotides comprising sequences encoding the CXC chemokine H174 and modified forms thereof, the encoded CXC chemokine H174 and modified forms thereof, methods of identifying inhibitors of the interaction between H174 and receptors for H174, and methods of treating nervous system conditions involving H174.

ICM C07K014-52 ICS A61K038-19; C07H021-04

15-5 (Immunochemistry)

AIDS (disease) IT

AIDS (disease)

(AIDS dementia complex; CXC chemokine H174 and methods for preventing damage to the nervous system)

TΤ Mental disorder

Mental disorder

(AIDS dementia, CXC chemokine H174 and methods for preventing damage to the nervous system)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:464292 CAPLUS

DOCUMENT NUMBER:

131:102188

TITLE:

SOURCE:

Preparation of thiophene nitrone compounds for treatment of neurodegenerative, autoimmune, and

inflammatory diseases

INVENTOR(S):

Kelleher, Judith A.; Maples, Kirk R.; Zhang,

Yong-Kang

PATENT ASSIGNEE(S):

Centaur Pharmaceuticals, Inc., USA

PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE DATE

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19990722
    WO 9936420
                          Α1
                                            WO 1999-US786
                                                                   19990114
        W: AL, AM, AT, AU, AZ BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB. GD, GE, GH, GM, HR, HU, ID, [L, IN, IS, JP,
             KE, KG, KP, KR, KZ LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL
                               PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US
                                UZ, VN, YU, ZW
         RW: GH, GM, KE, LS, MW SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, 3J, CF, CG, CI.
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     ZA 9900255
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                                19990714
                                            ZA 1999-255
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     CA 2318555
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                                            CA 1999-2318555
                                                                   19990114
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                          A1
                                19990802
                                            AU 1999-22269
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                                20000118
                                            US 1999-245126
     US 6015831
                          Α
                                                                   19990114
                          A1
                                20001102
                                            EP 1999-902243
     EP 1047688
                                                                   19990114
                                20021120
     EP 1047688
                         B1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, VL, SE, MC, PT,
             IE, FI
     JP 2002509147
                          T2
                                20020326
                                            JP 2000-540136
                                                                   19990114
                         E
                                            AT 1999-902243
     AT 228123
                                20021215
                                                                   19990114
                         В
     CN 1136211
                                20040128
                                            CN 1999-803301
                                                                   19990114
                         A1
                                20030904
     AU 2003227320
                                            AU 2003-227320
                                                                   20030729
PRIORITY APPLN. INFO.:
                                                                P 19980116
                                            US 1998-72790P
                                            AU 1999-22269
                                                               A3 19990114
                                            WO 1999-US786
                                                               W 19990114
```

OTHER SOURCE(S): MARPAT 131:102188

GΙ

$$(W)_{\mathfrak{m}}$$
 $C = N + R^3$ 
 $R^2$ 

The title compds. I [R1 = H, (un)substituted alkyl, halo, etc.; R2 = H, (un)substituted alkyl, etc.; R3 = H, (un)substituted alkyl, cycloalkenyl, etc.; W = SR4, etc.; R4 = (un)substituted alkyl, alkynyl, etc.; n = 0 - 2; m = 1 - 3; provided that m + n = 3] are prepared I are also useful as anal. reagents for detecting free radicals.  $\alpha$ -[2-(4-Methoxyphenylthio)-5-thienyl]-N-tert-butylnitrone (preparation given) inhibited  $\beta$ -amyloid-induced release of interleukin-1 $\beta$  by at least 30% compared to the controls.

IC ICM C07D333-34 ICS A61K031-38

CC 27-8 (Heterocyclic Compounds (One Hetero Atom))
 Section cross-reference(s): 1, 80

IT Alzheimer's disease Rheumatoid arthritis Septicemia

(preparation and therapeutic effect of thiophene nitrone compds.)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES A /AILABLE FOR THIS

PECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:464287 CAPLUS

DOCUMENT NUMBER: 131:102186

TITLE: Preparation of phenylthiofurylalkylnitrones for

treatment of neurological, autoimmune, and inflammatory disease and as analytical reagents. Kelleher, Judith A.; Maples, Kirk R.; Zhang,

Yong-Kang

Centaur Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S):

PCT Int. Appl., 59 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR (S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

|         |       |      |     |     |     | ND DATE APPLICATION |      |       |     |      |        |      |      |     |     |       |     |
|---------|-------|------|-----|-----|-----|---------------------|------|-------|-----|------|--------|------|------|-----|-----|-------|-----|
|         | 9936  |      |     |     |     |                     |      |       |     |      |        |      |      |     |     |       |     |
|         | W:    | AL,  | AM, | ΑT, | ΑU, | AZ,                 | BA,  | BB,   | BG, | BR   | , BY,  | CA,  | CH,  | CN, | CU  | , CZ, | DE, |
|         |       | DK,  | EE, | ES, | FI, | GB,                 | GD,  | GE,   | GH, | GM   | , HR,  | ΗU,  | ID,  | IL, | IN  | , IS, | JP, |
|         |       | KE,  | KG, | KP, | KR, | KZ,                 | LC,  | LK,   | LR, | LS   | , LT,  | LU,  | LV,  | MD, | MG  | , MK, | MN, |
|         |       | MW,  | MX, | NO, | NZ, | PL,                 | PT,  | RO,   | RU, | SD   | , SE,  | SG,  | SI,  | SK, | SL  | , TJ, | TM, |
|         |       | TR.  | TT, | UA, | UG, | US,                 | UZ,  | VN,   | YU, | ZW   | , AM,  | AZ,  | BY,  | KG, | ΚZ  | , MD, | RU, |
|         |       | TJ,  |     | •   | •   |                     | •    | •     | ·   |      |        |      |      |     |     |       |     |
|         | RW:   | GH,  | GM, | KE, | LS, | MW,                 | SD,  | SZ,   | UG, | ZW   | , AT,  | ΕE,  | CH,  | CY, | DE  | , DK, | ES, |
|         |       | FI,  | FR, | GB, | GR, | IE,                 | IT,  | LU,   | MC, | NL   | , PT., | SE,  | BF,  | ВJ, | CF  | , CG, | CI, |
|         |       | CM,  | GA, | GN, | GW, | ML,                 | MR,  | NE,   | SN, | TD   | , TG   |      |      |     |     |       |     |
| ZA      | 9900  | 252  |     |     | Α   |                     | 1999 | 0714  |     | ZA   | 1999-  | 252  |      |     |     | 19990 | 114 |
|         | 2318  |      |     |     |     |                     |      |       |     |      |        |      |      |     |     |       |     |
| AU      | 9923  | 192  |     |     | A1  |                     | 1999 | 0802  |     | AU   | 1999-  | 2319 | 2    |     |     | 19990 | 114 |
| AU      | 7427  | 68   |     |     | B2  |                     | 2002 | 0110  |     |      |        |      |      |     |     |       |     |
| US      | 5998  | 469  |     |     | Α   |                     | 1999 | 1207  |     | US   | 1999-  | 2451 | 30   |     |     | 19990 | 114 |
|         | 1047  |      |     |     |     |                     |      |       |     |      |        |      |      |     |     |       |     |
|         | R:    | ΑT,  | BE, | CH, | DE, | DK,                 | ES,  | FR,   | GB, | GR   | , IT,  | LI,  | LU,  | NL, | SE  | , MC, | PT, |
|         |       | ΙE,  | FI  |     |     |                     |      |       |     |      |        |      |      |     |     |       |     |
| JP      | 2002  | 5091 | 43  |     | T2  |                     | 2002 | 0326  |     | JP : | 2000-  | 5401 | 31   |     |     | 19990 | 114 |
| NZ      | 5057  | 57   |     |     | Α   |                     | 2002 | 0927  |     | NZ   | 1999-  | 5057 | 57   |     |     | 19990 | 114 |
| TW      | 4467  | 03   |     |     | В   |                     | 2001 | 0721  |     | TW   | 1999-  | 8810 | 0606 |     |     | 19990 | 115 |
|         | 6127  |      |     |     |     |                     | 2000 | 1003  |     | US   | 1999-  | 4081 | 26   |     |     | 19990 | 929 |
| US      | 6310  | 092  |     |     | B1  |                     | 2001 | 1030  |     | US : | 2000-  | 5057 | 16   |     |     | 20000 | 217 |
| PRIORIT | Y APP | LN.  |     |     |     |                     |      |       |     | US   | 1998-  | 7162 | 6P   |     | P : | 19980 | 116 |
|         |       |      |     |     |     |                     |      |       |     | US   | 1999-  | 2451 | 30   |     | A3  | 19990 | 114 |
|         |       |      |     |     |     |                     |      |       |     |      | 1999-  |      |      |     |     |       |     |
|         |       |      |     |     |     |                     |      |       |     |      | 1999-  |      |      |     |     |       |     |
| OTHER S | OURCE | (s): |     |     | MAR | PAT                 | 131: | 10218 |     |      |        |      |      |     |     |       |     |

GI

Title compds. [I; R1 = (substituted) alkyl, alkenyl, alkynyl, aralkyl, AB aryl, cycloalkyl, cycloalkylalkyl, cycloalkenyl; R2 = (substituted) alkyl, alkenyl, alkynyl, aralkyl, aryl, alkoxy, cycloalkyl, halo; R3 = H, (substituted) alkyl, alkenyl, alkynyl, aralkyl, aryl, cycloalkyl,

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cycloalkylalkyl; R4 = (subst tuted) alkyl, alkenyl, alkyny., aralkyl,
     aryl, cycloalkyl, cycloalkyl lkyl, cycloalkenyl; n = 0-2], were prepared as
     therapeutics for preventing and/or treating neurodegenerative, autoimmune
     and inflammatory conditions n mammals and as anal. reagents for detecting
     free radicals. Thus, 2-(4-methoxyphenylthio)-5-furaldehyde (preparation
     given), N-tert-butylhydroxyl; mine (preparation given), mol sieves, and silica
     gel were refluxed overnight n CHCl3 to give 78.8% \alpha-[2-(4
     methoxyphenylthio)-5-furyl]-1-tert-butylnitrone. I inhibited
     Aβ(1-42) β-pleated sheet for ation and/or β-amyloid-induced
     increase of interleukin-1\beta and/or IL-1\beta-induced cell toxic.ty by
     ≥30% compared to controls.
IC
     ICM C07D307-64
     ICS A61K031-34
     27-6 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 3, 80
IT
     AIDS (disease)
     AIDS (disease)
        (AIDS dementia complex, treatment; preparation of
        phenylthiofurylalkylnitrones for treatment of neurol., autoimmune, and
        inflammatory disease and as anal. reagents)
    Mental disorder
TT
     Mental disorder
        (AIDS dementia, treatment, preparation of
       phenylthiofurylalkylnitrores for treatment of neurol., autoimmune, and
        inflammatory disease and as anal. reagents)
     Anti-Alzheimer's agents
IT
     Anti-inflammatory agents
     Antiarthritics
     Antiparkinsonian agents
        (preparation of phenylthic furylalkylnitrones for treatment of neurol.,
        autoimmune, and inflammatory disease and as anal. reagents)
REFERENCE COUNT:
                         3
                               THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L55 ANSWER 14 OF 20 CAPLUS COPERIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        1999:282195 CAPLUS
DOCUMENT NUMBER:
                         130:311617
TITLE:
                         Preparation of \alpha-aryl-N-alkylnitrones for
                         treatment of neurodegenerative, autoimmune, and
                         inflammatory disease and as analytical reagents for
                         detection of free radicals.
                         Kelleher, Judith A.; Maples, Kirk R.;
INVENTOR (S):
                         Dykman, Alina; Zhang, Yong-Kang; Wilcox, Allan L.;
                         Levell, culian
PATENT ASSIGNEE(S):
                         Centaur Tharmaceuticals, Inc., USA
                         PCT Int. Appl., 104 pp.
SOURCE:
                         CODEN: PlXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                         APPLICATION NO.
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                                                                  -----
                         A1
                               19990429 WO 1998-US21624
                                                                 19981016
            AL, AM, AT, AU, AZ, FA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, CD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
             KG, KP, KR, KZ, LC, 1K, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, PT, FO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
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TT, UA, UG, US, UZ, \N, YU, ZW

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RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GI, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GV, ML, MR, NE, SN, TD, TG
                                                                      19981015
                                 19990416
                                              ZA 1998-9436
     ZA 9809436
                          7.
                                              US 1998-172753
                                                                      19981015
     US 6046232
                           I_{\gamma}
                                 20000404
                                              CA 1998-2305798
     CA 2305798
                           IA
                                 19990429
                                                                      19981016
                                              AU 1999-10833
     AU 9910833
                           I.1
                                 19990510
                                                                      19981016
                                              EP 1998-953456
     EP 1025079
                                                                      19981016
                           L1
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     EP 1025079
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                                 20050202
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             IE, FI
                                 20000829
                                              BR 1998-13256
                                                                      19981016
     BR 9813256
                                              TR 2000-2000 01023
     TR 200001023
                           72
                                 20001121
                                                                      19981016
                           T2
                                              JP 2000-516943
                                                                      19981016
     JP 2001520217
                                 20011030
                                              NZ 1998-503910
                                                                      19981016
     NZ 503910
                           A
                                 20020927
                                              RU 2000-112097
                                                                      19981016
     RU 2225392
                           C.5
                                 20040310
                                              AT 1998-953466
                                                                      19981016
     AT 288419
                           F:
                                 20050215
     ES 2235374
                           3.3
                                 20050701
                                              ES 1998-953466
                                                                      19981016
                                                                      19981017
     TW 226882
                           ь1
                                 20050121
                                              TW 1998-87117185
                                                                      20000412
     NO 2000001914
                           A
                                 20000602
                                              NO 2000-1914
     US 6433008
                           Б1
                                 20020813
                                              US 2000-529555
                                                                      20000718
     US 6441032
                           E.1
                                 20020827
                                              US 2000-635527
                                                                      20000809
                                              US 2002-74595
     US 2003087957
                           \lambda 1
                                 20030508
                                                                      20020211
     US 2005124691
                           A.1
                                 20050609
                                              US 2004-792910
                                                                      20040305
                                              US 1997-62324P
                                                                   Ρ
PRIORITY APPLN. INFO.:
                                                                      19971017
                                              US 1997-63736P
                                                                   Ρ
                                                                      19971029
                                              US 1998-90475P
                                                                   P
                                                                      19980624
                                              US 1998-172763
                                                                   A1 19981015
                                              WO 1998-US21524
                                                                   W
                                                                      19981016
                                                                   A3 20000209
                                              US 2000-500650
                                              US 2002-74595
                                                                   A1 20020211
OTHER SOURCE(S):
                         MARPAT 130:311617
```

GI

Title compds. [I; R1 = alkoxy, alkaryloxy, alkcycloalkoxy, aryloxy, AB cycloalkoxy; R2 = H, alkoxy, alkcycloalkoxy, cycloalkoxy, halo; adjacent R1R2 = alkylenedioxy; R3 = H, alkoxy, alkcycloalkoxy, cycloalkoxy, halo; R4 = H, alkyl; R5 = (substituted) alkyl, cycloalkyl; with provisos], were prepared Thus, 4-hydroxybenzaldehyde was refluxed 30 min. with NaOH in EtoH; I(CH2)5CH3 was added and the mixture was refluxed 68 h to give a residue which was kept 18 h with PrNO2, NH4Cl, and Zn in EtOH/H2O to give 12.4% α-4-hexyloxyphenyl-N-propylnitrone. Several [ at 100 mg/kg orally in rats treated with M. tuberculin in incomplete Freunds adjuvant reduced CNS inflammatory deficit. ICM C07C291-02

- IC
  - ICS A61K031-135
- CC 25-22 (Benzene, Its D∈rivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1, 80 ТТ Mental disorder (dementia, treatment of HIV dementia; preparation of α-aryl-N-alkylnitrones for treatment of neurodegenerative autoimmune, and inflammatory disease and as anal. reagent: for

detection of free radicals)

Anti-Alzheimer's agents TΤ

Autiarthritics

Antiparkinsonian agents

(preparation of  $\alpha$ -aryl-N-allylnitrones for treatment of neurodegenerative, autoimmure, and inflammatory disease a:d as anal.

reagents for detection of free radicals)

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECOPD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

1998:751854 CAPLUS ACCESS ON NUMBER:

DOCUMENT NUMBER: 130:192459

TITLE: Transient expression of  $\beta$ -galactosidase in differentiating sporozoites of Eimeria tenella

AUTHOR (S): Kelleher, Michelle; Tomley, Fiona M.

CORPORATE SOURCE: Division of Molecular Biology, The Institute for Animal Health, Compton, Berkshire, RG20 NN, UK SOURCE :

Molecular and Biochemical Parasitology ( 998),

97(1,2), 21-31

CODEN: MBIFDP; ISSN: 0166-6851 Elsevier Science Ireland Ltd.

Journal DOCUMENT TYPE: English LANGUAGE:

PUBLISHER:

A transient transfection system has been developed for a member of the Apicomplexa, Eimeria tenella, using β-galactosidase (βgal) from Escherichia coli as the reporter enzyme. Successfully expressed constructs contained sequences of the E. tenella microneme gene Etmic-1 fused to the coding region of lacZ. Transfectants expressing βgal were able to invade host cells and proceed through part of the life-cycle, forming schizonts from which merozoites were released. This indicated that transfectants could differentiate at least to first generation schizonts. However, this differentiation was delayed compared with unelectroporated sporozoites by approx. 15 h. Some merozoites arising from transfected sporozoites also expressed βgal. These results are encouraging for the development of a stable transfection system for E. tenella, using  $\beta$ gal as a reporter enzyme.

3.2 (Biochemical Genetics)

Section cross-reference(s): 10

REFERENCE COUNT: THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS 24 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:87722 CAPLUS

DOCUMENT NUMBER: 128:140602

Furan nitrone compounds TITLE:

INVENTOR(S): Kelleher, Judith A.; Maples, Kirk R.;

Waterbury, Lowell David; Wilcox, Allan L.; Xu, Hong;

Zhang, Yong-kang

PATENT ASSIGNEE(S): Centaur Pharmaceuticals, Inc., USA; Kelleher, Judith

A.; Maples, Kirk R.; Waterbury, Lowell David; Wilcox,

Allan L.; Xu, Hong; Zhang, Yong-Kang

SOURCE. PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KINI DATE APPLICATION NO DATE
      PATENT NO.
                               A1 19980129 WO 1997-US1196 19970714
      WO 9803496
           W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CI, CN, CU, CZ, DE,
                DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, K; KP, KR, KZ, LC,
                 LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, M:, NO, NZ, PL, PT,
                 RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
                 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
            RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, D:, DK, ES, FI, FR,
                 GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, C2, CG, CI, CM, GA,
                 GN, ML, MR, NE, SN, TD, TG
                                         19980129 CA 1997-226082,
19980210 AU 1997-36555
      CA 2260825
                                AA
                                        19980129
                                                                                     19970714
      AU 9736555
                                A1
                                                                                     19970714
      AU 715226
                                B2
                                         20000120
      EP 1021430
                                         20000726 EP 1997-933350
                                A1
                                                                                   19970714
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO
L 20000929 NZ 1997-333705

JP 2000514822 T2 20001107 JP 1998-506980

US 5942507 A 19990824 US 1997-895968

ZA 9706388 A 19980219 ZA 1997-6388

US 6040444 A 20000321 US 1999-317267

US 6051571 A 20000418 US 1999-317266

US 6376540 B1 20020423 US 1999-230065

PRIORITY APPLN. INFO.:
                                                                                     19970714
                                                                                     19970714
                                                                                     19970717
                                                                                     19970718
                                                                                     19990524
                                                       US 1999-317266 19990524

US 1999-230065 19991217

US 1996-22169P P 19960719

WO 1997-US11960 W 19970714

US 1997-895968 A3 19970717
                                                                                     19990524
OTHER SOURCE(S): MARFAT 128:140602
      Furan nitrones, e.g., N-isopropyl-\alpha-(5-sulfo-2-furany.) nitrone (I),
```

were prepared for treatment of neurodegenerative and/or autoimmune disorders. Thus, refluxing N-isopropylhydroxylamine and Na 5-formyl-2-furansulfonate in MeOH gave a 75% yield of I. In rats I reduced the mean infarct volume of a stroke by 32% when administered 3 h post stroke. Other tests of the nitrones included (1 inhibition of Aβ beta-pleated sheet formation, (2) protection against Aβ(25-35)-induced neuronal cell loss, (3) inflammation reduction, (4) reduction of  $\beta$ -amyloid-induced increased cytokine release, (5) reduction of locomotor impairment duε to Aβ-peptide, (6) reduction of spatial learning deficit, (7) prevention of MBP-induced exptl. allergic encephalomyelitis, (8) prevention of weight loss, (9) and reduction of learning deficit in autoimmune mice.

IC ICM C07D307-64 ICS A61K031-34

27-6 (Heterocyclic Compcunds (One Hetero Atom)) Section cross-reference(s): 1, 63

3

Alzheimer's disease IT

Anti-inflammatory agents

Autoimmune disease

(furan nitrone compds. for treatment of neurodegenerative and/or autoimmune disorders)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L55 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:657035 CAPLUS

DOCUMENT NUMBER:

126:14770

```
TITLE:
                        Alkaline and acid phosphatase inhibitors in treatment
                        of neurological disorders
INVENTOR S):
                        Kelleher, Jucith A.; Eveleth, David D.
PATENT A :SIGNEE(S):
                        Cortex Pharmaceuticals, Inc., USA
                        U.S., 11 pp., Cont.-in-part of U.S. Ser. Nc. 71,281,
SOURCE:
                        abandoned.
                        CODEN: USXXAN
                        Patent
DOCUMENT TYPE:
                        English
LANGUAGE
FAMILY A 'C. NUM. COUNT:
                        2
PATENT I FORMATION:
     PAT :NT NO.
                   KIND DATE APPLICATION NO. LATE
                        A 19961(22 US 1994-252109 19940601
US 1993-71281 B2 19930601
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                             -----
     --- ------
     US \567724
PRIORITY APPLN. INFO.:
    The present invention provides a method of inhibiting \beta-amyloic
     tox city in brain cells. The method includes administering to the cells
     an .. mount of an alkaline phosphatase inhibitor which is pharmacol. effective to
     redice degeneration in the cells. Methods of treatment of peripheral
     neu opathy are also provided using acid or alkaline phosphatase inhibitors.
     ICM A61K031-38
IC
INCL 514 68000
    1-1 (Pharmacology)
     Sec ion cross-reference(s): 63
TΤ
     Alzheimer's disease
     Amy oidosis
     Bra n, disease
     Dow 's syndrome
        alkaline and acid phosphatase inhibitors in treatment of neurol.
        disorders)
L55 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSIO! NUMBER: 1995:364210 CAPLUS
DOCUMENT NUMBER:
                        122:123145
TITLE:
                        Alkaline and acid phosphatase inhibitors in treatment
                       of neurological disorders
INVENTOR S):
                       Kelleher, Judith A.; Eveleth, David D., Jr.
                        Cortex Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 21 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE APPLICATION NO.
                                                                DATE
                A1 19941208 WO 1994-US6186 19940601
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     WO 4427603
        W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE,
            HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ,
            PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                         AA
                               19941238 CA 1994-2163966
     CA :163966
                                                                19940601
     AU 9470506
                         A1
                                        AU 1994-70506
                               19941220
                                                                 19940601
    AU 698101
                        B2
A1
                               19981022
     EP 01441
                               19960320 EP 1994-919323
                                                                 19940601
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                           US 1993-71281 A 19930601
```

PRIORITY APPLN. INFO.:

```
WO 1994-US6186
                                                              W 19940601
    A method is provided for inhibiting \beta-amyloid toxicity in brain
AB
    cells. The method includes administering to the cells in amount of an alkaline
    phosphatase inhibitor which is pharmacol. effective in reduction of
    degeneration in the cells Methods of treatment for pe ipheral neuropathy
     are also provided using acid or alkaline phosphatase in ibitors. Inhibition
     of \beta-amyloid peptide toxicity with e.g. levamisole is described.
    ICM A61K031-425
IC
    ICS A61K031-305; A61K033 16; A61K031-225
    1-11 (Pharmacology)
CC
    Mental disorder
TΤ
        (Alzheimer's disease, &lkaline and acid phosphatase inhibitors
       for treatment of neurol. disorders)
L55 ANSWER 19 OF 20 CAPLUS (OPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        1995:362498 CAPLUS
DOCUMENT NUMBER:
                        122:173146
TITLE:
                        Use of metabotropic receptor agonis:s in treatment of
                        progressive neurodegenerative diseases
                        Eveleth, David D.; Kelleher, Judith A.;
INVENTOR(S):
                        Cotmar, Carl W.
                        Corte: Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 26 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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    PATENT NO.
                               DATE
                                         APPLICATION NO. DATE
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    WO 9427602
                        A1 19941208 WO 1994-US5751 19940520
        W: AT, AU, BB, BG, BF, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE,
            HU, JP, KG, KP, KF, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ,
            PL, PT, RO, RU, SI, SE, SI, SK, TJ, TT, UA, UZ, VN
        RW: AT, BE, CH, DE, DI, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
            BF, BJ, CF, CG, Cl, CM, GA, GN, ML, MR, NE, SN, TD, TG
    AU 9468363
                                        AU 1994-68363
                        A1
                               19941220
                                                                 19940520
    US 5622981
                               19970422
                                          US 1995-418903
                         Α
                                                                 19950407
PRIORITY APPLN. INFO.:
                                                              A 19930601
                                           US 1993-70518
                                           WO 1994-US5751
                                                             W 19940520
    A pharmaceutical composition is disclosed which comprises a metabotropic
AΒ
    receptor agonist, e.g. trans-aminocyclopentane-1,3-dicarboxylic acid
     (trans-ACPD) or 1S,3R-ACPI, for use in treating a mamma with a
    neurodegenerative disease which is caused at least in part by
    β-amyloid protein neurotoxicity. In a study using cultured embryonic
    rat hippocampal neurons, the inhibition of \beta-amyloid-induced neuronal
    death by ACPD is consistent with the concns. of ACPD known to be required
    to occupy the metabotropic receptor.
TC
    ICM A61K031-42
    ICS A61K031-19; A61K031-66
    1-11 (Pharmacology)
CC
    Section cross-reference(s): 63
IT
    Mental disorder
        (Alzheimer's disease, metabotropic receptor agonists for
       neurodegenerative disease treatment)
IT
    Mental disorder
        (dementia, multi-infarct, metabotropic receptor agon.sts for
       neurodegenerative disease treatment)
```

IT

Brain, disease

(m.lti-infarct dementia, metabot ropic receptor agonists for ne rodegenerative disease treatment)

L55 ANSWE 20 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

1992:585706 CAPLUS ACCESSION JUMBER:

DOCUMENT N MBER: 117:185706

Simple derivation of TFIID-dependent RNA polymerase II TITLE:

> transcription systems from Schizosaccharomyces pombe and other organisms, and factors required for

transcriptional activation

AUTHOR (S): Flanagan, Peter M.; Kelleher, Raymond J., III

; Tschochner, Herbert; Sayre, Michael H.; Konnberg,

Roger D.

CORPORATE COURCE: Sch. Med., Stanford Univ., Stanford, CA, 943(5, USA SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (1992), 89(16), 7659-63

CODEN: PNASA6; [SSN: 0027-8424

DOCUMENT T PE: Journal English LANGUAGE:

Resolution of whole cell extract through two chromatog, steps yields a single AB prote n fraction requiring only the addition of TFIID for the in:tiation of trans ription at RNA polymerase II promoters. This approach allows the converient generation of RNA polymerase II transcription systems from Saccharomyces cerevisiae, human lymphocytes, and S. pombe. TFIIIs from all three organisms are interchangeable among all three systems. The S. cerev siae and S. pombe systems support effects of acidic activator prote ns, provided a further proteil fraction from S. cerevisiae is suppl ed. This further fraction is distinct from the mediator of trans riptional activation describe I previously and represents a second component in addition to general initiation factors that may facilitate a response to acidic activators.

3-1 (Niochemical Genetics) CC

Section cross-reference(s): 10

transcription initiation protein RNA polymerase TFIID; ST

Schizosaccharomyces initiation factor invitro transcription

initiation; evolution conservation transcription initiation factor

TT Saccharomyces cerevisiae

Schizosaccharomyces pombe

(T::IID-dependent RNA polymerase [I in vitro transcription system de: ived from chromatog. isolated factors of)

Transcription, genetic ΙT

(TillD-dependent RNA polymerase II in vitro,

Schizosaccharomyces pombe-derivel factors for initiation of)

IT Gene

RL: B OL (Biological study)

(TFIID-dependent RNA polymerase [I transcription system derived from Schizosaccharomyces pombe for in vitro transcription of,

factors for)

IT Evolu ion

> (conservation in, of transcription initiation factor of Saccharomyces cerevisiae and human lymphocyte and Schizosaccharomyces por (be)

Ribonucleic acid formation factors IT

RL: B.OL (Biological study)

(Schizosaccharomyces pombe whole cell extract chromatog.

derived, for in vitro gene transcription by TFIID-dependent RNA polymerase II)

Ribon.cleic acid formation factors IT

RL: BIOL (Biological study)

(TFIID (transcription factor IID , Schizosaccharomyces pombe

chromatog. isolated initiation factors and, for gene in vitro transcription)  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1}{2}\right)$ 

Searched by John DiNatale x2-2557

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FILE 'REGIST'Y' ENTERED AT 11:22:41 ON 10 MAY 2006

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http://www.cas.org/ONLINE/UG/regprops.html

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http://www.cas.org/infopolicy.html

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=> d stat que L37

L34 1794 SEA FILE=REGISTRY ABB=ON PLU=ON 333.871.5/RID

L35 221 SEA FILE=CAPLUS ABB ON PLU=ON L34

L36 520762 SEA FILE=CAPLUS ABB:ON PLU=ON ?NEURO?/BI L37 13 SEA FILE=CAPLUS ABB:ON PLU=ON L35 AND L36

=> d stat que L45

L34 1794 SEA FILE=REGISTRY ABB=ON PLU=ON 333.871.5/RID

L35 221 SEA FILE=CAPLUS ABB::ON PLU=ON L34

L36 520762 SEA FILE=CAPLUS ABB::ON PLU=ON ?NEURO?/BI L38 39352 SEA FILE=CAPLUS ABB::ON PLU=ON ALZHEIMER?/BI L39 28450 SEA FILE=CAPLUS ABB::ON PLU=ON SCHIZO?/BI

L40 0 SEA FILE=CAPLUS ABB::ON PLU=ON "MENTAL AND BEHAVIORAL

DISORDER"/CT

L41 15699 SEA FILE=CAPLUS ABB ON PLU=ON "MENTAL AND BEHAVIORAL

DISORDERS"/CT

L42 12834 SEA FILE=CAPLUS ABB ON PLU=ON DEMENT?/BI

143 7220 SEA FILE=CAPLUS ABB::ON PLU=ON NEUROGEN?/OBI OR NEURO

GEN?/OBI

L44 10303 SEA FILE=CAPLUS ABB ON PLU=ON ?PSYCHIAT?/BI

L45 22 SEA FILE=CAPLUS ABB ON PLU=ON L35 AND (L36 OR (L38 OR L39 OR

L40 OR L41 OR L42 OR L43 OR L44))

=> s L37 or L45

L56 22 L37 OR L45

=> s L56 not L55

L57 22 L56 NOT L55

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L57 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:269420 CAPLUS

DOCUMENT NUMBER: 144:331435

TITLE: Preparation of imidazo[1,2-a]pyridin-3-amines and

related compounds as mGLur5 receptor modulators Kuehnert, Sven; Oberboersch, Stefan; Sundermann,

INVENTOR(S): Kuehnert, Sven; Oberboersch, Stefan; Sundermann, Corinna; Haurand, Michael; Jostock, Ruth; Schiene,

Klaus; Tzschentke, Thomas; Christoph, Thomas;

Kaulartz, Dagmar

PATENT ASSIGNEE(S): Gruenenthal GmbH, Germany

SOURCE: PCT Int. Appl., 227 pp.

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DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
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|               |      |          |                 |          |
| WO 2006029980 | A1   | 20060323 | WO 2005-EP54436 | 20050908 |

W: AF, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CP, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, CE, GF, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, 1C, LF, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, 13, N1, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SN, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 7A, ZN, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, FJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, CH, GN, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, FY, KC, KZ, MD, RU, TJ, TM

PRIORITY APPLN INFO.:

DE 2004-102004044884A 20040914

- AB Title compds. I [A1 = N, CR1a; A2 = N, CR1b; A3 = N, CR1c; A4 = N, CF1d; R1a, R1b, R1c, R1d = H, halo, NO2, etc.; R2, R3 = H, COR20, COOR22, εtc.; R20, R22 = H, alkyl, aryl, etc.; M1 = aryl, heteroaryl with provisos; M2 = aryl, heteroaryl with provisos] and their pharmaceutically acceptable salts and formulations were prepared For example, a one-pot condensation-cyclization of 2-aminopyrazine, cyclopentyl isocyanide and 5-phenylethynylthiophene-2-aldehyde afforded claimed imidazopyridinylamine II in 54% yield. In mGLur5 receptor binding assays, compds. I exhibited IC50 values ranging from 0.0028-15.55 μM.
- CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
  Section cross-reference(s): 1, 63
- IT Mental and behavioral disorders

(attention deficit disorder, treatment of; preparation of imidazc[1,2-a]pyridin-3-amines and related compds. as mGLur5 receptor modulators)

IT Mental and behavioral disorders

(depression, treatment of; preparation of imidazo[1,2-a]pyridin-3-amines and related compds. as mGLur5 receptor modulators)

II

IT Analgesics

Anti-Alzheimer's agents
Anticonvulsants
Antidepressants
Antidiarrheals
Antidiuretics
Antimigraine agents
Antiobesity agents
Antiparkinsonian agents
Antipsychotics

```
Ant itussives
     Cocnition enhancers
     Consination chemotherapy
    Muscle relaxants
     Nervous system agents
        (preparation of imidazo[1,2-a pyridin-3-amines and related compds. as mGLur5
        receptor modulators)
IT
    Alzheimer's disease
    Anc rexia
    Bul imia
     Cachexia
     Cardiovascular system, disease
     Cognitive disorders
     Cough
     Diuresis
     Drug withdrawal
     Epi lepsy
     Multiple sclerosis
     Obesity
     Pain
     Parkinson's disease
     Pruritus
       Schizophrenia
        (treatment of; preparation of imidazo[1,2-a]pyridin-3-amines and related
        compds. as mGLur5 receptor modulators)
IT
     880250-84-0P, N-tert-Butyl-2-[5- (6-methylpyridin-2-
     yl)ethynyl]thiophen-2-yl]imidazo 1,2-a]pyrazin-3-amine
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of imidazo[1,2-a pyridin-3-amines and related compds. as mGLur5
        receptor modulators)
TT
     880238-42-6P, Cyclopentyl[2-(5-phenylethynylthiophen-2-
                                           880238-59-5P
     yl) imidazo[1,2-a]pyrazin-3-yl]am. ne
                                                           880238-72-2P
                                   88(239-08-7P
     880238-86-8P
                    880239-02-1P
                                                  880239-25-8P
                                   88(239-65-6P, (4-Methoxybenzyl)[5-
                    880239-52-1P
     880239-39-4P
     metnyl-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyridin-3-yl]amine
     880239-77-0P, (4-Methoxybenzyl)[c-methyl-2-(5-phenylethynylthiophen-2-
                                           880239-91-8P, (4-Methoxybenzyl)[7-
     yl) imidazo[1,2-a]pyridin-3-yl]am.ne
     methyl-2-(5-phenylethynylthiophe: -2-yl)imidazo[1,2-a]pyridin-3-yl]amine
     880240-04-0P, (4-Methoxybenzyl)[8-methyl-2-(5-phenylethynylthiophen-2-
     yl) imidazo[1,2-a]pyridin-3-yl]am: ne
                                           880240-20-0P, [5,7-Dimethyl-2-(5-
     phenylethynylthiophen-2-yl)imidaro[1,2-a]pyridin-3-yl](4-
                           880240-35-'P, [8-Benzyloxy-2-(5-
     methoxybenzyl)amine
     phenylethynylthiophen-2-yl)imida:o[1,2-a]pyridin-3-yl](4-
     methoxybenzyl)amine
                           880240-50-(P, (4-Methoxybenzyl)[2-(5-
     phenylethynylthiophen-2-yl)imida:o[1,2-a]pyridin-3-yl]amine
     880240-65-3P, (4-Methoxybenzyl) [:-(5-phenylethynylthiophen-2-
     yl) imidazo[1,2-a]pyrazin-3-yl]am: ne 880240-79-9P,
     tert-Butyl[2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-
                880240-95-9P, tert-Butyl[6-methyl-2-(5-phenylethynyithiophen-2-
     yl]amine
                                           880241-08-7P, [8-Benzyloxy-2-(5-
     yl) imidazo[1,2-a]pyridin-3-yl]am: ne
     phenylethynylthiophen-2-yl)imida: o[1,2-a]pyridin-3-yl] (3-
                           880241-22-! P, (3-Methoxybenzyl) [5-methyl ·2-(5-
     methoxyphenyl)amine
     phenylethynylthiophen-2-yl)imida: o[1,2-a]pyridin-3-yl]amine
     880241-38-3P, (3-Methoxybenzyl) [8-methyl-2-(5-phenylethynylthiophen-2-
     yl) imidazo[1,2-a]pyridin-3-yl]am:ne 880241-52-1P, [5,7-Dimethyl-2-(5-
     phenylethynylthiophen-2-yl)imida: o[1,2-a]pyridin-3-yl](3-
     methoxybenzyl)amine 880241-64-!P, [8-Benzyloxy-2-(5-
```

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phenylethynylthiophen-2-yl)imidazo[1,2-a]|yridin-3-yl](3-
                    880241-76-9P, (3-Me<sup>-</sup>hoxybenzyl)[2-(5-
methoxybenzyi)amine
phenylethyny (thiophen-2-yl) imidazo[1,2-a] yridin-3-yl] amine
880241-88-3P. (3-Methoxybenzyl) [2-(5-phenylethynylthiophen-2-
yl)imidazo[1.2-a]pyrazin-3-yl]amine 880:42-03-5P, [6-Methyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl](1-phenylethyl)arine
880242-16-0P. [7-Methyl-2-(5-phenylethyny thiophen-2-yl) imidazo[1,2-
                                     880: 42-30-8P, [5,7-Dimethyl-2-(5-
a]pyridin-3-vl](1-phenylethyl)amine
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl](1-phenylethyl)amine
880242-44-4P, [8-Benzyloxy-2-(5-phenyleth, nylthiophen-2-yl)imidazo[1,2-
alpyridin-3-yl] (1-phenylethyl) amine 880242-57-9P,
(1-Phenylethy1) [2-(5-phenylethynylthiophe: -2-yl)imidazo[1,2-a]pyrazin-3-
           830242-70-6P, (2-Chlorobenzyl) 5,7-dimethyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl]amine
880242-84-2P, (3-Chloro-4-fluorophenyl) [7 phenyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl]amine
880242-99-9P, (4-Methoxybenzyl)[7-methyl-:-(5-phenylethynylthiophen-2-
yl)imidazo[1,2-a]pyrimidin-3-yl]amine 880243-14-1P, [8-Methyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl](1-phenylethyl)amine
880243-28-7P. [7-Methyl-2-(5-phenylethyny]thiophen-2-yl)imidazo[1,2-
                                       8:0243-42-5P, (2-Methoxybenzyl)[7-
a]pyrimidin-3-yl](1-phenylethyl)amine
methyl-2-(5-phenylethynylthiophen-2-yl)im_dazo[1,2-a]pyridin-3-yl]amin∈
880243-56-1P. (2-Methoxybenzyl) [2-(5-phenylethynylthiophen-2-
yl)imidazo[1,2-a]pyridin-3-yl]amine
                                    880:43-70-9P, (2-Chlorobenzyl)[2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl]amine
880243-85-6P, (2-Methoxybenzyl)[7-methyl-1-(5-phenylethynylthiophen-2-
yl)imidazo[1,2-a]pyrimidin-3-yl]amine 860243-99-2P, (3-Methoxyphenyl)[6-
methyl-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyridin-3-yl]amine
880244-15-5P, [5,7-Dimethyl-2-(5-phenylet) ynylthiophen-2-yl) imidazo[1,2-
a]pyridin-3-yl](3-methoxyphenyl)amine 880244-30-4P,
(3-Methoxyphenyl) [2-(5-phenylethynylthioplen-2-yl)imidazo[1,2-a]pyrazin-3-
          880244-44-0P, [7-Ethyl-2-(5-ph\epsilon nylethynylthiophen-2-
yl) imidazo[1,2-a]pyridin-3-yl] (2-methoxybenzyl) amine
                                                       880244-58-6P,
(2-Chlorobenzyl) [7-ethyl-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-
a]pyridin-3-yl]amine
                      880244-72-4P, [7-t∈rt-Butyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yridin-3-yl](3-chloro-4-
fluorophenyl; amine
                    880244-86-0P, (3-Metloxybenzyl)[7-methyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yrimidin-3-yl]amine
880245-01-2P, [7-Ethyl-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-
phenylethynylthiophen-2-yl)imidazo[1,2-a]ryridin-3-yl](2-
fluorophenyl)amine
                    880245-29-4P, (2,4-Difluorophenyl)[2-(5-
phenylethynylthiophen-2-yl)-7-(3-phenylprcpyl)imidazo[1,2-a]pyridin-3-
yl]amine
           880245-41-0P, (4-Fluorobenzyl) 17-methyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a]ryridin-3-yl]amine
880245-53-4P, [5,7-Dimethyl-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-
a]pyridin-3-yl](4-fluorobenzyl)amine 88(245-69-2P, [7-Ethyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a],yridin-3-yl](3-
trifluoromethylbenzyl)amine
                              880245-83-0F, [7-Isopropyl-2-(5-
phenylethynylthiophen-2-yl)imidazo[1,2-a]ryridin-3-yl](3-
trifluoromethylbenzyl)amine 880245-97-6P, tert-Butyl[2-(4-
phenylethynylthiophen-2-yl)imidazo[1,2-a];yrazin-3-yl]amine
880246-11-7P, [2-(5-Phenylethynylthiophen-2-yl)imidazo[1,2-
a]pyrazin-3-yl](1,1,3,3-tetramethylbutyl)amine 880246-23-1P,
Butyl [2-(4-phenylethynylthiophen-2-yl)imicazo[1,2-a]pyrazin-3-yl]amine
880246-34-4P, [2-(5-Phenylethynylthiophen-2-yl)imidazo[1,2-a]pyridin-3-
yl] (1,1,3,3-tetramethylbutyl)amine 880246-48-0P,
[2-(5-Pyridinylthiophen-2-yl)imidazo[1,2-\(\bar{e}\)]pyrazin-3-yl](1,1,3,3-
tetramethylbutyl)amine 880246-61-7P
                                     880246-76-4P,
[6-Chloro-2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyridin-3-
```

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yl](1 1,3,3-tetramethylbutyl)amine
                                     880246-89-9P, [6,8-Dichloro 2-(5-
pheny ethynylthiophen-2-yl)imidazo:1,2-a]pyridin-3-yl](1,1,3,3-
tetramethylbutyl)amine 880247-03-0P 880247-16-5P,
Dimet \yl[2-(5-phenylethynylthiopher -2-yl)imidazo[1,2-a]pyrazin-3 yl]amine
880247-31-4P, Methyl [2-(5-phenylet).ynylthiophen-2-yl)imidazo [1,2
a]pyr zin-3-yl]amine 880247-45-0P, N-[2-(5-Phenylethynylthiophen
2-yl) midazo[1,2-a]pyrazin-3-yl]acetamide 880247-59-6P,
Ethyl[2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-yl]amine
880247-73-4P, Propyl[2-(5-phenylet)ynylthiophen-2-yl)imidazo[1,2
a]pyr (zin-3-yl]amine 880247-82-5P, Butyl[2-(5-
pheny.ethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-yl]amine
880247-83-6P, (2-Methylpropyl)[2-(5-phenylethynylthiophen-2-
yl)imidazo[1,2-a]pyrazin-3-yl]amin∈ 880247-84-7P,
Penty [2-(5-phenylethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-y] amine
880247-85-8P 880247-86-9P, Benzyl[2-(5-
pheny:ethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-yl]amine
880247-87-0P, [2-(5-Phenylethynyltriophen-2-yl)imidazo[1,2-
a]pyrazin-3-ylamino]acetic acid methyl ester 880247-88-1P
880247-89-2P 880247-90-5P, N-[2-(5-Phenylethynylthiophen-
2-yl) midazo[1,2-a]pyrazin-3-yl]benzamide 880247-91-6P,
[2-(5 Phenylethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-yl]pyridin-3-
ylmethylamine 880247-92-7P, 2,2-Dimethyl-N-[2-(5-
pheny ethynylthiophen-2-yl)imidazo[1,2-a]pyrazin-3-yl]propionamice
880247-93-8P, 3-Methoxy-N-[2-(5-phenylethynylthiophen-2-
yl)imidazo[1,2-a]pyrazin-3-yl]benzamide 880247-94-9P 880247
-95-0P 880247-96-1P, Methyl 2-[5-(phenylethynyl)thiophen-2-
yl]-3 (2,4,4-trimethylpentan-2-ylamino)imidazo[1,2-a]pyrazine-8-
              880247-97-2P, 2-[5-(Fhenylethynyl)thiophen-2-yl]-N (2,4,4-
carboxylate
trime:hylpentan-2-yl)imidazo[1,2-a]pyrimidin-3-amine 880247-98-3P
, 2-[5-[(6-Methylpyridin-2-yl)ethynyl]thiophen-2-yl]-N-(2,4,4-
trime:hylpentan-2-yl)imidazo[1,2-a]pyrazin-3-amine 880247-99-4P,
N-Cyctohexyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-
amine 880248-00-0P, 2-[5-(Phenylethynyl)thiophen-2-yl]-3-
(piperidin-1-yl) imidazo[1,2-a] pyrazine 880248-01-1P,
N-teru-Butyl-N-methyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-
                    880248-02-2P, Methyl 2-[5-(phenylethynyl)thiophen-2-
a]pyrazin-3-amine
yl]-3 (2,4,4-trimethylpentan-2-ylamino)imidazo[1,2-a]pyridine-6-
carboxylate 880248-03-3P, N-tert-Butyl-2-[5-(pyridin-2-
yleth/nyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochlor de
880248-04-4P, 8-Bromo-N-cyclopentyl-6-methyl-2-[5-(pyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine 880248-05-5P
, N,N Diethyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-
        880248-06-6P, N-tert-Butyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-
yl]imidazo[1,2-a]pyridin-3-amine 880248-07-7P,
N-tert-Butyl-2-[5-(phenylethynyl)furan-2-yl]imidazo[1,2-a]pyrazin-3-amine
880248-08-8P, 8-Bromo-N-tert-butyl-6-methyl-2-[3-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                 880248-09-9P,
N-tert-Butyl-8-methyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[3,2-
a]pyridin-3-amine 880248-10-2P, N-Methyl-2-[5-
(phenylethynyl) thiophen-2-yl]-N-(2,4,4-trimethylpentan-2-yl) imidazo[1,2-
a]pyrazin-3-amine Hydrochloride 880248-11-3P,
2-[5-{Phenylethynyl}thiophen-2-yl]-3-(pyrrolidin-1-yl)imidazo[1,1-
a]pyrazine Hydrochloride 880248-12-4P, N-tert-Butyl-2-[5-[(4-
fluorophenyl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
                880248-13-5P, N-tert-Butyl-7-methyl-2-[5-
Hydrochloride
(phenylethynyl) thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
                                                              880248-14-6P,
N-term-Butyl-5-methyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-
a]pyridin-3-amine
                    880248-15-7P, 8-Chloro-2-[3-(pyridin-2-
ylethynyl)phenyl]-6-(trifluoromethyl)-N-(2,4,4-trimethylpentan-2-
yl) im_dazo[1,2-a]pyridin-3-amine 880248-16-8P,
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N-tert-Butyl-2 [5-[(3-fluorophenyl)ethynyl]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-17-9P,
N-tert-Butyl-2 [5-[(2-fluorophenyl)ethynyl]tniophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-18-0F, Methyl
3-(tert-butylanino)-2-[5-(phenylethynyl)thicohen-2-yl]imidazo[1,2-
a]pyrazine-8-c rboxylate 880248-19-1P, N-tert-Butyl-2-[5-
(pyrazin-2-yle-hynyl) thiophen-2-yl] imidazo[1,2-a] pyrazin-3-amine
880248-20-4P, :-[5-[(4-Aminophenyl)ethynyl]thiophen-2-yl]-N-tert-
butylimidazo[1 2-a]pyrazin-3-amine 880248-21-5P,
N-Isopropyl-2- 5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-
amine 880248-22-6P, N-tert-Butyl-2-[5-(thiorhen-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride
880248-23-7P, N-tert-Butyl-2-[3-(pyridin-2-
ylethynyl)phen 'l]imidazo[1,2-a]pyrazin-3-amine 880248-24-8P,
N-tert-Butyl-2 [5-[(2-methoxyphenyl)ethynyl]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-25-9P,
N-tert-Butyl-2 [5-[(3-methoxyphenyl)ethynyl]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-26-0P,
N-tert-Butyl-2 [5-[(4-methoxyphenyl)ethynyl]thiophen-2-yl]imidazo(1,2-
a]pyrazin-3-am ne Hydrochloride
                                  880248-27-1P 880248-28-2P,
N-tert-Butyl-2 [4-(pyridin-2-ylethynyl)phenyl]imidazo[1,2-a]pyrazin-3-
amine 880248-29-3P, N-tert-Butyl-2-[3-[(6-methylpyridin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyrazin-3-amine 880248-30-6P,
N-tert-Butyl-2 [2-methyl-6-(phenylethynyl)pyridin-3-yl]imidazo[1,2-
a]pyrazin-3-am ne 880248-31-7P, N-tert-Butyl-2-[5-(pyridin-2-
ylethynyl) furan-2-yl] imidazo[1,2-a] pyrazin-3-amine 880248-32-8P,
3-(tert-Butylamino)-2-[5-(phenylethynyl)thicphen-2-yl]imidazo[1,2-
a]pyrazine-8-carboxylic acid 880248-33-9P, 4-[[5-[3-(tert-
Butylamino)imidazo[1,2-a]pyrazin-2-yl]thiophen-2-yl]ethynyl]phenol
Hydrochloride 880248-34-0P, 3-[[5-[3-(tert-
Butylamino) imidazo[1,2-a]pyrazin-2-yl]thiophen-2-yl]ethynyl]phenol
880248-35-1P, :-[5-[(3-Aminophenyl)ethynyl]thiophen-2-yl]-N-tert-
butylimidazo[1 2-a]pyrazin-3-amine Hydrochloride 880248-36-2P,
2-[5-[(2-Aminophenyl)ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-
a]pyrazin-3-am ne Hydrochloride
                                  880248-37-3P 880248-38-4P,
N-tert-Butyl-2 [6-(phenylethynyl)pyridin-3-yl]imidazo[1,2-a]pyrazin-3-
amine 880248-39-5P, N-tert-Butyl-2-[5-(pyridin-4-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride
880248-40-8P, ::-[5-[(6-Aminopyridin-3-yl)ethynyl]thiophen-2-yl]-N-
tert-butylimidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-41-9P
, N-tert-Butyl 2-[5-(pyrimidin-2-ylethynyl)thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-42-0P,
N-tert-Butyl-2 [5-[(4-methylpyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am ne Hydrochloride 880248-43-1P,
N-tert-Butyl-2 [5-[(5-methylpyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-am_ne Hydrochloride
                                  880248-44-2P, N-tert-Butyl-2-[5-(pyridin-
4-ylethynyl)th ophen-2-yl]imidazo[1,2-a]pyridin-3-amine Hydrochloride
880248-45-3P, N-tert-Butyl-2-[5-(thiazol-2-ylethynyl)thiophen-2-
yl]imidazo[1,2 a]pyrazin-3-amine 880248-46-4P,
2-[5-(Pyridin-::-ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
Hydrochloride 880248-47-5P, N-tert-Butyl-2-[5-[(5-methylthiophen-
2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride
880248-48-6P, 2-[5-[(6-Aminopyridin-2-yl)ethynyl]thiophen-2-yl]-N-
tert-butylimidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-49-7P
, N-tert-Butyl 2-[5-[(3-methylthiophen-2-yl)ethynyl]thiophen-2-
yl]imidazo[1,2 a]pyrazin-3-amine 880248-50-0P,
N-tert-Butyl-2 [4-(phenylethynyl)thiazol-2-yl]imidazo[1,2-a]pyrazin-3-
amine 880248-51-1P, N-tert-Butyl-2-[5-(m-tolylethynyl)thiophen-2-
yl]imidazo[1,2 a]pyrazin-3-amine 880248-52-2P,
3-[[5-[3-(tert Butylamino)imidazo[1,2-a]pyrazin-2-yl]thiophen-2-
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yl]ethy nyl]benzonitrile Hydrochloride
                                             880248-53-3P, N-tert-Butyl ·2-[5-
     (pyridi 1-2-ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrimidin-3-amine
     880248-54-4P, N-tert-Butyl-2-[6-(phenylethynyl)pyridin-2-
     yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-55-5P,
     N-tert-Butyl-N-methyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-yl]imid izo[1,2-
     a]pyrazin-3-amine 880248-56-6P, 4-[[5-[3-(tert-
     Butylamino)imidazo[1,2-a]pyrazin-2-yl]thiophen-2-yl]ethynyl]benzonitrile
     Hydrochloride 880248-57-7P, 2-[5-[(1H-Indol-6-
     yl)ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-a]pyrazin-3-amin:
     Hydrochloride 880248-58-8P, N-tert-Butyl-2-[2-
     (phenylethynyl)thiazol-5-yl]imidazo[1,2-a]pyrazin-3-amine
     880248-59-9P 880248-60-2P, 2-[5-[[3-(1H-Pyrrol-1-
     yl)phen/l]ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-a]pyrazin 3-amine
     Hydrochloride 880248-61-3P, 2-[5-[(1H-Indol-4-
     yl)ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-a]pyrazin-3-amin-
     Hydrochloride 880248-62-4P, N-tert-Butyl-2-[5-[(3-
     nitroph=nyl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
     Hydrochloride 880248-63-5P, N-tert-Butyl-2-[5-[(4-
     nitrophenyl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
     Hydrochloride 880248-64-6P, N-tert-Butyl-2-[5-(thiazol-4-
     ylethyn/l)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochlorid:
     880248-65-7P, 2-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyrazin-2-
     yl]thiophen-2-yl]ethynyl]phenol 880248-66-8P,
     2-[5-[[3-(Aminomethyl)phenyl]ethynyl]thiophen-2-yl]-N-tert-
     butylimidazo[1,2-a]pyrazin-3-amine 880248-67-9P,
     2-[5-(Biphenyl-3-ylethynyl)thiophen-2-yl]-N-tert-butylimidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-68-0P,
     N-tert-3utyl-2-[5-(thiophen-3-ylethynyl)thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-69-1P,
     N-tert-Butyl-2-[5-[[3-(dimethylamino)phenyl]ethynyl]thiophen-2-
     yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-70-4P,
     N-tert-Butyl-2-[5-[(6-methylpyridin-2-yl)ethynyl]thiophen-2-yl]imi-lazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-71-5P,
     N-tert-Butyl-2-[5-[(3-fluoropyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-72-6P,
     N-tert-Butyl-2-[5-[[3-(methylamino)phenyl]ethynyl]thiophen-2-
     yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-73-7P,
     N-tert-Butyl-2-[5-(p-tolylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-
     amine 880248-74-8P, N-tert-Butyl-2-[5-(o-tolylethynyl)thiophen-2-
     yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-75-9P,
     N-tert-3utyl-2-[4-methyl-5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-76-0P,
     N-tert-Butyl-2-[4-methyl-5-(pyridin-2-ylethynyl)thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-77-1P,
     N-tert-Butyl-2-[5-[(6-fluoropyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine 880248-78-2P, N-tert-Butyl-2-[5-[(2-
     nitrophenyl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
     880248-79-3P, N-tert-Butyl-8-chloro-2-[5-(pyridin-2-
     ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine 880248-80-6P
     , N-tert-Butyl-2-[5-[(6-methoxypyridin-2-yl)ethynyl]thiophen-2-
     yl]imidazo[1,2-a]pyrazin-3-amine 880248-81-7P,
     N-tert-Butyl-2-[5-[(5-fluoropyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine Hydrochloride 880248-82-8P 880248-83-9
P, N-tert-Buzyl-2-[5-[(5-methoxypyridin-3-yl)ethynyl]thiophen-2-
     yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-84-0P,
     5-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyrazin-2-yl]thiophen-2-
     yl]ethynyl]nicotinonitrile Hydrochloride 880248-85-1P,
     N-tert-Butyl-2-[5-[[3-(methylthio)phenyl]ethynyl]thiophen-2-yl]imidazo[1,2-
     a]pyrazin-3-amine 880248-86-2P, Methyl 3-[[5-[3-(tert-
     Butylamino) imidazo[1,2-a]pyrazin-2-yl]thiophen-2-yl]ethynyl]benzoa:e
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880248-87-3P, N-tert-Butyl-2-[5-[(3,5-difluorc)yridin-2-
yl)ethynyl]thioplen-2-yl]imidazo[1,2-a]pyrazin-3-amine
880248-88-4P, N-tert-Butyl-2-[5-(phenylethynyl thiazol-2-
yl]imidazo[1,2-a]pyrazin-3-amine 880248-89-5P,
N-tert-Butyl-2-[2-(pyridin-4-ylethynyl)thiazol-5-yl]imidazo[1,2-a]pyrazin-
3-amine 880248-90-8P, 3-[[5-[3-(tert-Butylamin))imidazo[1,2-
a]pyrazin-2-yl]thiophen-2-yl]ethynyl]benzaldeh/de 880248-91-9P,
3-[[5-[3-(tert-Bitylamino)imidazo[1,2-a]pyrazi1-2-yl]thiophen-2-
yl]ethynyl]-4-fliorobenzonitrile 880248-92-0P,
N-tert-Butyl-2-[5-[[3-(trifluoromethyl)phenyl] >thynyl]thiophen-2-
yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-93-1P,
N-tert-Butyl-2-[2-(pyridin-2-ylethynyl)thiazol-5-yl]imidazo[1,2-a]pyrazin-
3-amine 880248-94-2P, N-tert-Butyl-2-[3-methyl-5-
(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride
880248-95-3P, N-tert-Butyl-2-[3-methyl-5-(pyridin-2-
ylethynyl)thioph∈n-2-yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride
880248-96-4P, N-tert-Butyl-2-[5-[(3-vinylphenyl)ethynyl]thiophen-2-
yl]imidazo[1,2-a]pyrazin-3-amine 880248-97-5P,
2-[5-[(1H-Imidazcl-4-yl)ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-
a]pyrazin-3-amine Hydrochloride 880248-98-6P,
N-tert-Butyl-2-[5-[(3-methylpyridin-2-yl)ethyn/l]thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-amine 880248-99-7P, N,N-Dimethyl-2-[5-(pyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
                                                        880249-00-3P,
N-tert-Butyl-2-[5-[[2-(tert-butyldiphenylsilyl+thiazol-5-
yl]ethynyl]thiopren-2-yl]imidazo[1,2-a]pyridin 3-amine
                                                         880249-01-4P,
3-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyridin-2-yl]thiophen-2-
                         880249-02-5P, N-tert-Butyl-2-[5-
yl]ethynyl]benzoritrile
(phenylethynyl) triazol-2-yl] imidazo[1,2-a] pyri lin-3-amine
                                                             880249-03-6P,
N-tert-Butyl-2-[5-(thiazol-5-ylethynyl)thiophe 1-2-yl]imidazo[1,2-a]pyridin-
          880249-04-7P, N-tert-Butyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-
3-amine
yl]imidazo[1,2-a]pyridin-3-amine Hydrochloride
                                                 880249-05-8P,
6-Chloro-N-cyclohexyl-2-[3-[(6-methylpyridin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyridin-3-amine
                                                  880249-06-9P,
5,7-Dimethyl-N-phenethyl-2-[5-(phenylethynyl)tniophen-2-yl]imidazo[1,2-
                      880249-07-0P, N-(3-Metho (yphenethyl)-5,7-dimethyl-2-
a]pyrimidin-3-amine
[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]syrimidin-3-amine
880249-08-1P, N-(3-Methoxyphenethyl)-5,7-dimet 1yl-2-[4-
(phenylethynyl) thiophen-2-yl]imidazo[1,2-a]pyr midin-3-amine
880249-09-2P, N-(3-Methoxyphenethyl)-5,7-dimetnyl-2-[5-
(phenylethynyl) furan-2-yl]imidazo[1,2-a]pyrimidin-3-amine
                                                             880249-10-5P,
N-(4-Chlorobenzyl)-8-methyl-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-
                    880249-11-6P, N-(3-Methoxyphenethyl)-5-methyl-2-[4-
a]pyridin-3-amine
(phenylethynyl) thiophen-2-yl] imidazo[1,2-a] pyridin-3-amine
880249-12-7P, N-(2-Methylhexan-2-yl)-2-[4-(phenylethynyl)thiophen-
2-yl]imidazo[1,2-a]pyrazin-3-amine 880249-13-8P,
N-Phenethyl-2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-
amine 880249-14-9P, N-(3-Methoxyphenethyl)-2-[4-
(phenylethynyl) thiophen-2-yl] imidazo[1,2-a]pyr azin-3-amine
880249-15-0P, 2-[4-(Phenylethynyl)thiophen-2-yl]-N-[2-(thiophen-2-
yl)ethyl]imidazo[1,2-a]pyrazin-3-amine
                                         88024 7-16-1P,
N-(4-Chlorobenzyl)-2-[5-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-
3-amine 880249-17-2P, N-(2-Methylpentan-2-yl)-2-[5-
(phenylethynyl) thiophen-2-yl] imidazo[1,2-a] pyr zin-3-amine
880249-18-3P, N-(Cyclohexylmethyl)-2-[4-(phenylethynyl)thiophen-2-
yl]imidazo[1,2-a]pyrazin-3-amine 880249-19-4P,
N-(2-Methoxybenzyl)-2-[5-(phenylethynyl)furan-2-yl]imidazo[1,2-a]pyrazin-3-
        880249-20-7P, N-(Cyclohexylmethyl)-2-[4-(phenylethynyl)thiophen-2-
                                   880249-21-89, N-(2-Methylpentan-2-yl)-2-
yl]imidazo[1,2-a]pyridin-3-amine
[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]syridin-3-amine
880249-22-9P, 8-Eromo-6-methyl-2-[3-[(6-methyl)yridin-2-yl)ethynyl]phenyl]-
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N-(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a]pyridin-3-amine
880249-23 OP, 8-Bromo-N-cyclopentyl-6-methyl-2-[3-(pyridin-2-
ylethynyl phenyl] imidazo[1,2-a] pyridin-3-amine 880249-24-1P,
N-Cyclopentyl-2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazi:-3-
amine 880249-25-2P, N-(1-Phenylethyl)-2-[4-
(phenylet:ynyl) thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
880249-26-3P, N-(2-Methylpentan-2-yl)-2-[4-(phenylethynyl)thiophen-
2-yl]imidazo[1,2-a]pyrazin-3-amine 880249-27-4P, 8-Bromo-N-cyclohexyl-6-
methyl-2-[5-(pyridin-2-ylethynyl)furan-2-yl]imidazo[1,2-a]pyridin-3-amine
880249-28-5P, N-Cyclopentyl-2-[5-(phenylethynyl)furan-2-
yl]imidazo[1,2-a]pyrazin-3-amine
                                  880249-29-6P, N-(3-Methoxypheneth·1)-7-
methyl-2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrimidin-3-anine
880249-30 9P, 8-(Benzyloxy)-2-[5-(phenylethynyl)thiophen-2-yl]-N-(2,..,4-
trimethylpentan-2-yl)imidazo[1,2-a]pyridin-3-amine
                                                     880249-31-0P,
8-(Benzyloxy)-N-cyclopentyl-2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-
                    880249-32-1P, 8-(Benzyloxy)-N-(2-methylpentan-2-v1)-2-
a]pyridin 3-amine
[4-(pheny:ethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
880249-33 · 2P, 6-Chloro-N-(4-fluorobenzyl) - 2-[5-(phenylethynyl) furan-::-
yl]imidazo[1,2-a]pyridin-3-amine
                                   880249-34-3P, 6-Bromo-N-butyl-5-methyl-
2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
880249-35 4P, N-(Furan-2-y1)-8-methyl-2-[5-(phenylethynyl)furan-2-
yl]imidazo[1,2-a]pyridin-3-amine
                                  880249-36-5P, N-(Furan-2-yl)-2-[5
(phenylethynyl) furan-2-yl]imidazo[1,2-a]pyridin-3-amine
                                                          880249-37-↔P,
N-(Furan-2-yl)-2-[5-(phenylethynyl)furan-2-yl]-7-propylimidazo[1,2-
                    880249-38-7P, 5,7-Dimethyl-2-[4-
a]pyridin 3-amine
(phenylethynyl) thiophen-2-yl]-N-[3-(trifluoromethyl) phenyl] imidazo[1,2-
a]pyrimid.n-3-amine
                      880249-39-8P, 6-Bromo-N-(4-chlorophenethyl)-8-methyl-
2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
880249-40 1P, N-(4-Chlorophenethyl)-7-phenyl-2-[4-(phenylethynyl)thiophen-
                                     880249-41-2P, N-Phenethyl-7-phenyl-2-
2-yl]imidazo[1,2-a]pyridin-3-amine
[4-(pheny:ethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
880249-42 3P, N-(4-Chlorobenzyl)-5,7-dimethyl-2-[4-(phenylethynyl)th ophen-
2-yl]imidazo[1,2-a]pyridin-3-amine
                                     880249-43-4P, 6-Bromo-N-(4-
chlorobenzyl)-5-methyl-2-[4-(phenylethynyl)thiophen-2-yl]imidazo[1,2
a]pyridin 3-amine
                    880249-44-5P, 8-Brono-N-(4-chlorobenzyl)-6-methy -2-[4-
(phenylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
                                                             880249-45-6P,
N-(3-Methoxyphenethyl)-2-[4-(phenylethynyl)thiophen-2-yl]-5-
propylimidazo[1,2-a]pyridin-3-amine
                                     830249-46-7P, 6-Bromo-8-methyl 2-[4-
(phenylethynyl)thiophen-2-yl]-N-[2-(thiophen-2-yl)ethyl]imidazo[1,2-
                    880249-47-8P, 7-Phenyl-2-[4-(phenylethynyl)thiophen-2-
a]pyridin 3-amine
yl]-N-[2-;thiophen-2-yl)ethyl]imidazo[1,2-a]pyridin-3-amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of imidazo[1,2-a]pyridin-3-amines and related compds. as mGLur5
   receptor modulators)
880249-48-9P, 6,8-Dibromo-N-(2-methylpentan-2-yl)-2-[5-
(phenylethynyl) thiophen-2-yl] imidazo[1,2-a] pyridin-3-amine
                                                              880249-49-0P,
6-Bromo-N (2,6-dimethylphenyl)-8-methyl-2-[4-(phenylethynyl)thiophen 2-
yl]imidazo[1,2-a]pyridin-3-amine 880249-50-3P,
N-Cyclohexyl-2-[3-(pyridin-2-ylethynyl)phenyl]imidazo[1,2-a]pyrazin-3-
amine 880249-51-4P, 2-[3-(Pyridin-2-ylethynyl)phenyl]-N-(2,4,4-
trimethylpentan-2-yl)imidazo[1,2-a]pyrazin-3-amine 880249-52-5P,
N-Cyclopentyl-2-[4-(pyridin-2-ylethynyl)phenyl]imidazo[1,2-a]pyrazin 3-
        880249-53-6P, 8-Chloro-2-[4-(pyridin-2-ylethynyl)phenyl]-6-
trifluoromethyl-N-(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a]pyridin-5-
amine 880249-54-7P, N-4-Fluorophenyl-2-[4-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyrazin-3-amine 880249-55-8P,
N-Cyclopenty1-2-[2-methy1-6-(phenylethynyl)pyridin-3-yl]imidazo[1,2-
a]pyrazin 3-amine 880249-56-9P, N-Cyclonexyl-2-[2-methyl-6-
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(phenylethynyl)pyridin-3-yl]imidazo[1,2-a]pyrazi 1-3-amine
880249-57-0P, N-Cyclopentyl-2-[5-(pyridin-2-ylet 1ynyl)furan-2-
yl]imidazo[1,2-a]pyrazin-3-amine
                                  880249-58-1P, 8-Bromo-N-cyclopentyl-6-
methyl-2-[5-(pyridin-2-ylethynyl)furan-2-yl]imic zo[1,2-a]pyridin-3-amine
880249-59-2P, N-Cyclohexyl-2-[5-(pyridin-2-yleth.nyl)furan-2-
yl]imidazo[1,2-a]pyrazin-3-amine 880249-60-5P,
2-[5-(Pyridin-2-ylethynyl)furan-2-yl]-N-(2,4,4-t imethylpentan-2-
yl)imidazo[1,2-a]pyrazin-3-amine 880249-61-6P,
N-Cyclopentyl-2-[3-[(6-methylpyridin-2-yl)ethynyl]phenyl]imidazo[1,2-
a]pyrazin-3-amine
                    880249-62-7P, 8-Bromo-N-cycl >pentyl-6-methyl-2-[4-
(pyridin-2-ylethynyl)phenyl]imidazo[1,2-a]pyridi 1-3-amine
880249-63-8P, N-Cyclohexyl-2-[3-[(6-methylpyridi 1-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyrazin-3-amine 380249-64-9P,
N-(4-Fluorophenyl)-2-[3-[(6-methylpyridin-2-yl)ethynyl]phenyl]imidazo[1,2-
                   880249-65-0P, 2-[5-(Pyridin-?-ylethynyl)thiophen-2-yl]-
a]pyrazin-3-amine
N-(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a]pyri nidin-3-amine
880249-66-1P, N-Cyclohexyl-2-[3-(pyridin-2-yleth/nyl)phenyl]imidazo[1,2-
                      880249-67-2P, 2-[3-(Pyridi 1-2-ylethynyl)phenyl]-N-
a]pyrimidin-3-amine
(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a]pyrimilin-3-amine
880249-68-3P, 2-[6-(Phenylethynyl)pyridin-3-yl]-N-(2,4,4-trimethylpentan-2-
yl)imidazo[1,2-a]pyrimidin-3-amine 880249-69-4<sup>3</sup>, N-Cyclopentyl-2-[5-
(pyridin-2-ylethynyl) furan-2-yl]imidazo[1,2-a]py imidin-3-amine
880249-70-7P, N-tert-Butyl-2-[5-(pyridin-2-yleth/nyl)furan-2-
yl]imidazo[1,2-a]pyrimidin-3-amine
                                    880249-71-83, N-Cyclopentyl-2-[3-[(6-
methylpyridin-2-yl)ethynyl]phenyl]imidazo[1,2-a] yyrimidin-3-amine
880249-72-9P, N-Cyclopentyl-2-[3-(pyridin-2-ylet nynyl)phenyl]imidazo[1,2-
a]pyridin-3-amine
                    880249-73-0P, N-tert-Butyl-2-[3-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                880249-74-1P,
2-[3-(Pyridin-2-ylethynyl)phenyl]-N-(2,4,4-trime:hylpentan-2-
yl)imidazo[1,2-a]pyridin-3-amine
                                  880249-75-2P, N-4-Fluorophenyl-2-[3-
(pyridin-2-ylethynyl)phenyl]imidazo[1,2-a]pyridi 1-3-amine
                                                            880249-76-3P,
N-tert-Butyl-2-[4-(pyridin-2-ylethynyl)phenyl]im:dazo[1,2-a]pyridin-3-
        880249-77-4P, N-Cyclopentyl-2-[2-methyl-5-(phenylethynyl)pyridin-3-
yl]imidazo[1,2-a]pyridin-3-amine
                                  880249-78-5P, N-(4-Fluorophenyl)-2-[2-
methyl-6-(phenylethynyl)pyridin-3-yl]imidazo[1,2-a]pyridin-3-amine
880249-79-6P, N-Cyclopentyl-6-methyl-2-[5-(pyrid:n-2-ylethynyl)thiophen-2-
yl]imidazo[1,2-a]pyridin-3-amine 880249-80-9P, N-tert-Butyl-6-methyl-2-
[5-(pyridin-2-ylethynyl)thiophen-2-yl]imidazo[1,?-a]pyridin-3-amine
880249-81-0P, N-Cyclohexyl-6-methyl-2-[5-(pyridi 1-2-ylethynyl)thiophen-2-
yl]imidazo[1,2-a]pyridin-3-amine 880249-82-1P, 6-Methyl-2-[5-(pyridin-2-
ylethynyl)thiophen-2-yl]-N-(2,4,4-trimethylpenta1-2-yl)imidazo[1,2-
                   880249-83-2P, 6-Methyl-2-[2-methyl-6-
a]pyridin-3-amine
(phenylethynyl)pyridin-3-yl]-N-(2,4,4-trimethylp≥ntan-2-yl)imidazo[1,2-
a]pyridin-3-amine
                   880249-84-3P, N-Cyclopentyl-5-methyl-2-[5-(pyridin-2-
ylethynyl) furan-2-yl] imidazo[1,2-a] pyridin-3-ami ne
                                                     880249-85-4P,
N-Cyclohexyl-6-methyl-2-[3-[(6-methylpyridin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyridin-3-amine
                                                  880249-86-5P,
N-Cyclohexyl-7-methyl-2-[5-(pyridin-2-ylethynyl):hiophen-2-yl]imidazo[1,2-
                    880249-87-6P, 7-Methyl-2-[5-(pyridin-2-
a]pyridin-3-amine
ylethynyl)thiophen-2-yl]-N-(2,4,4-trimethylpenta1-2-yl)imidazo[1,2-
                    880249-88-7P, N-tert-Butyl-7-methyl-2-[3-(pyridin-2-
a]pyridin-3-amine
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                 880249-89-8P,
N-4-Fluorophenyl-7-methyl-2-[3-(pyridin-2-ylethy nyl)phenyl]imidazo[1,2-
a]pyridin-3-amine
                    880249-90-1P, N-tert-Butyl-7 methyl-2-[4-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                880249-91-2P,
N-4-Fluorophenyl-7-methyl-2-[5-(pyridin-2-ylethy yl) furan-2-yl]imidazo[1,2-
                    880249-92-3P, N-Cyclohexyl-8-methyl-2-[6-
a]pyridin-3-amine
(phenylethynyl)pyridin-3-yl]imidazo[1,2-a]pyridi 1-3-amine
                                                            880249-93-4P,
N-Cyclopentyl-2-[6-(phenylethynyl)pyridin-3-yl]inidazo[1,2-a]pyridin-3-
        880249-94-5P, N-tert-Butyl-2-[6-(phenyle:hynyl)pyridin-3-
amine
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yl]imidazo[1,2-a]pyridin-3-amine
                                  880249 95-6P, N-Cyclohexyl-2-[6-
(phenylethyryl)pyridin-3-yl]imidazo[1,2-a pyridin-3-amine
2-[6-(Phenylethynyl)pyridin-3-yl]-N-(2,4,:-trimethylpentan-2-
yl)imidazo[1,2-a]pyridin-3-amine
                                   880249 97-8P, N-tert-Butyl-2-[5-
(pyridin-2-) lethynyl) furan-2-yl]imidazo[1 2-a]pyridin-3-amine
880249-98-9F, N-Cyclohexyl-2-[5-(pyridin-?-ylethinyl)furan-2-
yl]imidazo[1,2-a]pyridin-3-amine
                                   880249 ·99-0P, N-4-Fluorophenyl-2-[5
(pyridin-2-)lethynyl)furan-2-yl]imidazo[1.2-a]pyridin-3-amine
880250-00-0F, N-Cyclohexyl-2-[3-[(6-methylpyridin-2-
yl)ethynyl]rhenyl]imidazo[1,2-a]pyridin-3 amine
                                                  880250-01-1P.
2-[3-[(6-Methylpyridin-2-yl)ethynyl]phenyl]-N-(2,4,4-trimethylpentan-2-
yl)imidazo[1,2-a]pyridin-3-amine
                                   880250 02-2P, N-tert-Butyl-5-methyl 2-
[3-[(6-methylpyridin-2-yl)ethynyl]phenyl] midazo[1,2-a]pyridin-3-amine
880250-03-3F, 5-Methyl-2-[3-[(6-methylpyridin-2-yl)ethynyl]phenyl]-N-
(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a pyridin-3-amine
N-Cyclohexyl-5,7-dimethyl-2-[3-(pyridin-2-ylethynyl)phenyl]imidazo[1,2.
                      880250-05-5P, N-Cyclohexyl-5,7-dimethyl-2-[2-methyl-
a]pyrimidin-3-amine
6-(phenylethynyl)pyridin-3-yl]imidazo[1,2 a]pyrimidin-3-amine
880250-06-6F, N-Cyclopentyl-5,7-dimethyl-2-[5-(pyridin-2-ylethynyl)furan-2-
                                     880250-07-7P, N-tert-Butyl-5,7-
yl]imidazo[],2-a]pyrimidin-3-amine
dimethyl-2-{5-(pyridin-2-ylethynyl)furan-2-yl]imidazo[1,2-a]pyrimidin-3-
        880250-08-8P, N-4-Fluorophenyl-8-nethyl-2-[3-(pyridin-2-
amine
ylethynyl) phenyl] imidazo[1,2-a] pyridin-3-amine
                                                 880250-09-9P,
N-Cyclohexyl-8-methyl-2-[4-(pyridin-2-ylethynyl)phenyl]imidazo[1,2-
a]pyridin-3 amine 880250-10-2P, N-Cyclo exyl-7-ethyl-2-[5-(pyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyr.din-3-amine
                                                       880250-11-3P,
7-Ethyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-yl]-N-(2,4,4-trimethylpentan-
                                     880230-12-4P, N-Cyclohexyl-7-ethyl-2-
2-yl)imidazc[1,2-a]pyridin-3-amine
[3-(pyridin-2-ylethynyl)phenyl]imidazo[1, ?-a]pyridin-3-amine
880250-13-5P, N-Cyclopentyl-7-ethyl-2-[4-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                 880250-14-6P,
N-Cyclopenty1-7-ethy1-2-[6-(phenylethynyl.pyridin-3-yl]imidazo[1,2-
a]pyridin-3-amine
                    880250-15-7P, N-tert-3utyl-7-ethyl-2-[6-
(phenylethyryl)pyridin-3-yl]imidazo[1,2-a pyridin-3-amine
                                                            880250-16-8P,
N-tert-Buty]-7-ethyl-2-[5-(pyridin-2-ylet \u00e4ynyl)furan-2-yl]imidazo[1,2-
                    880250-17-9P, 7-Isopropyl-2-[5-(pyridin-2-
a]pyridin-3-amine
ylethynyl) thiophen-2-yl]-N-(2,4,4-trimeth/lpentan-2-yl) imidazo[1,2-
                    880250-18-0P, N-tert-Butyl-7-isopropyl-2-[3-(pyridin-2-
a]pyridin-3-amine
ylethynyl) phenyl] imidazo [1,2-a] pyridin-3-amine
                                                 880250-19-1P,
N-tert-Butyl-7-isopropyl-2-[4-(pyridin-2-/lethynyl)phenyl]imidazo[1,2-
                    880250-20-4P, N-Cyclonexyl-7-isopropyl-2-[5-(pyridin-2-
a]pyridin-3-amine
ylethynyl) furan-2-yl] imidazo[1,2-a] pyridin-3-amine
                                                     880250-21-5P,
N-tert-Buty]-7-isopropyl-2-[3-[(6-methylp:/ridin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyridin-3 amine
                                                  880250-22-6P,
6-Chloro-N-cyclopentyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-yl]imidazo[1,2-
                  880250-23-7P, N-tert-Butyl-6-chloro-2-[5-(pyridin-2-
a]pyridin-3-amine
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
                                                        880250-24-8P,
6-Chloro-N-cyclohexyl-2-[3-(pyridin-2-yle:hynyl)phenyl]imidazo[1,2-
a]pyridin-3-amine 880250-25-9P, 6-Chlor-2-[3-(pyridin-2-
ylethynyl)phenyl]-N-(2,4,4-trimethylpenta::-2-yl)imidazo[1,2-a]pyridin-3-
        880250-26-0P, N-tert-Butyl-6-chloso-2-[4-(pyridin-2-
ylethynyl)phenyl]imidazo[1,2-a]pyridin-3-amine
                                                 880250-27-1P,
6-Chloro-N-cyclohexyl-2-[4-(pyridin-2-yle-hynyl)phenyl]imidazo[1,2-
                   880250-28-2P, N-tert-Butyl-6-chloro-2-[5-(pyridin-2-
a]pyridin-3-amine
ylethynyl) furan-2-yl] imidazo[1,2-a]pyridi:1-3-amine
                                                     880250-29-3P,
6-Chloro-N-cyclohexyl-2-[5-(pyridin-2-yle-hynyl)furan-2-yl]imidazo[1,2-
a]pyridin-3-amine
                   880250-30-6P, 6-Chloro-2-[5-(pyridin-2-ylethynyl)furan-
2-yl]-N-(2,4,4-trimethylpentan-2-yl)imidazo[1,2-a]pyridin-3-amine
880250-31-7P, 6-Chloro-N-cyclopentyl-2-[3-[(6-methylpyridin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyridin-3 amine
                                                  880250-32-8P,
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N-tert-Butyl-6-chlor(-2-[3-[(6-methylpyridin-2-
yl)ethynyl]phenyl]im dazo[1,2-a]pyridin-3-amine
                                                  380250-33-9P
880250-34-0P, N-Methyl-2-[5-(pyridin-2-ylethynyl)tiophen-2-
yl]imidazo[1,2-a]pyrazin-3-amine
                                   880250-35-1P
                                                  380250-36-2P
              88025(-38-4P, tert-Butyl[2-(5-pyrid n-2-ylethynylthiazol-2-
880250-37-3P
yl)imidazo[1,2-a]pyr din-3-yl]amine
                                      880250-39-5P tert-Butyl[2-(2-
pyridin-2-ylethynyltliazol-5-yl)imidazo[1,2-a]pyrilin-3-yl]amine
880250-40-8P, tert-Butyl[2-[5-(6-fluoropyridin-2-y.ethynyl)thiophen-2-
yl]imidazo[1,2-a]pyridin-3-yl]amine Hydrochloride
                                                    880250-41-9P,
tert-Butyl[2-[5-(3-clloro-5-fluorophenylethynyl)th.ophen-2-yl]imidazo[1,2-
a]pyridin-3-yl]amine Hydrochloride
                                     880250-42-0P
                                                    880250-43-1P
880250-44-2P, tert-Butyl[2-[5-(3-trifluoromethoxyphenylethynyl)thi
ophen-2-yl]imidazo[1,2-a]pyrazin-3-yl]amine
                                              880250-45-3P
                                                             880250-46-4P,
tert-Butyl[2-[5-(3,5 dimethylphenylethynyl)thiophe 1-2-yl]imidazo[1,2-
a]pyridin-3-yl]amine Hydrochloride
                                     880250-47-5P, tert-Butyl[2-[5-(3-
fluoropyridin-2-ylet ynyl) thiophen-2-yl]imidazo[1, :-a]pyridin-3-yl]amine
Hydrochloride
                880250-48-6P
                               880250-49-7P, tert-3utyl[2-[5-(5-
chlorothiophen-2-ylethynyl)thiophen-2-yl]imidazo[1 2-a]pyridin-3-yl]amine
Hydrochloride
                880250-50-0P, tert-Butyl[2-[5-(5-m:thylpyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-yl amine Hydrochloride
880250-51-1P, 1-[3-[5-(3-tert-Butylaminoimidazo[1,?-a]pyridin-2-
yl)thiophen-2-ylethyryl]phenyl]ethane Hydrochlorid:
                                                      880250-52-2P,
[3-[5-(3-tert-Butylaminoimidazo[1,2-a]pyridin-2-yl thiophen-2-
ylethynyl]phenyl]metranol Hydrochloride
                                          880250-53-3P,
N-tert-Butyl-2-[5-[(:-methoxypyridin-2-yl)ethynyl]:hiophen-2-
yl]imidazo[1,2-a]pyr:din-3-amine
                                   880250-54-4P, N tert-Butyl-2-[5-
(thiophen-2-ylethyny:)thiophen-2-yl]imidazo[1,2-a]pyridin-3-amine
Hydrochloride
                880250-55-5P, 5-[[5-[3-(tert-Butylamino)imidazo[1,2-
a]pyridin-2-yl]thiophen-2-yl]ethynyl]-2-fluorobenz >nitrile Hydrochloride
880250-56-6P, N-tert Butyl-2-[5-[(3,4-difluorophen/1)ethynyl]thiophen-2-
                                  880250-57-7P, N·tert-Butyl-2-[5-[[3-
yl]imidazo[1,2-a]pyridin-3-amine
(methoxymethyl)phenyl]ethynyl]thiophen-2-yl]imidaz>[1,2-a]pyridin-3-amine
880250-58-8P, 2-[5-[3-Aminophenyl)ethynyl]thiophen-2-yl]-N-tert-
butylimidazo[1,2-a]pyridin-3-amine Hydrochloride
                                                   880250-59-9P,
N-tert-Butyl-2-[5-[(4-fluoro-3-methylphenyl)ethyny ]thiophen-2-
yl]imidazo[1,2-a]pyridin-3-amine Hydrochloride
                                                830250-60-2P,
N-tert-Butyl-2-[5-[(3,5-difluorophenyl)ethynyl]thiphen-2-yl]imidazo[1,2-
a)pyridin-3-amine &80250-61-3P, N-tert-Butyl-2-[,-(thiophen-3-
ylethynyl)thiophen-2.yl]imidazo[1,2-a]pyridin-3-am ne Hydrochloride
880250-62-4P, N-tert-Butyl-2-[5-[(3-methylpyridin-::-yl)ethynyl]thiophen-2-
yl]imidazo[1,2-a]pyridin-3-amine Hydrochloride
                                                 830250-63-5P,
3-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyridin-2-/1]thiophen-2-
yl]ethynyl]benzenesulfonamide Hydrochloride
                                              8802 0-64-6P.
3-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyridin-2-71]thiophen-2-
yl]ethynyl]benzoic acid
                          880250-65-7P, 3-[[5-[3-(:ert-
Butylamino) imidazo[1,2-a]pyridin-2-yl]thiophen-2-y.]ethynyl]benzamide
Hydrochloride
                880250-66-8P, N-[3-[[5-[3-(tert-Burylamino)imidazo[1,2-
a]pyridin-2-yl]thioplen-2-yl]ethynyl]phenyl]acetam.de
                                                        880250-67-9P,
N-tert-Butyl-N-methyl-2-{5-(pyridin-2-ylethynyl)th.ophen-2-yl]imidazo[1,2-
a]pyridin-3-amine
                   880250-68-0P, N,N-Dimethyl-2-[3-(pyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-am.ne
                                                       880250-69-1P,
N-tert-Butyl-N-methy]-2-[5-(pyridin-2-ylethynyl)th.azol-2-yl]imidazo[1,2-
                    880250-70-4P, [6-[[5-[3-(tert-3utylamino)imidazo[1,2-
a]pyridin-3-amine
a]pyridin-2-yl]thiophen-2-yl]ethynyl]pyridin-2-yl]:nethanol
N-[3-[[5-[3-(tert-Butylamino)imidazo[1,2-a]pyridin 2-yl]thiophen-2-
yl]ethynyl]phenyl]methanesulfonamide 880250-72-6P,
N-tert-Butyl-8-methyl-2-[5-(pyridin-2-ylethynyl)th.ophen-2-yl]imidazo[1,2-
a]pyrazin-3-amine Hydrochloride
                                 880250-73-7P, 2-[5-(Pyridin-2-
ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyridin-3-am ne
N-tert-Butyl-2-[5-[(3-chlorophenyl)ethynyl]thiophen-2-yl]imidazo[1,2-
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a]pyridin-3-amine
                         880250-75-9P, N-tert-Bu:yl-2-[5-[(2,3-
     difluorophenyl)ethynyl]thiophen-2-yl]imidaz,[1,2-a]pyridin-3-amine
     880250-76-0P, N-tert-Butyl-7-chloro-2-[5-(p/ridin-2-ylethynyl)thiophen-2-
     yl]imidazo[1,2-a]pyridin-3-amine
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of imidazo[1,2-a]pyridin-3-unines and related compds. as mGLur5
        receptor modulators)
TΤ
     880250-77-1P 880250-78-2P, [2-(5-Bromothiop ten-2-
     yl)imidazo[1,2-a]pyrazin-3-yl](1-phenylethy.)amine 880250-79-3P,
     [2-(5-Bromothiophen-2-yl)imidazo[1,2-a]pyra:in-3-yl](1,1,3,3-
     tetramethylbutyl)amine 880250-80-6P, [2-(;-Bromothiophen-2-
     yl)imidazo[1,2-a]pyridin-3-yl](1,1,3,3-tetrimethylbutyl)amine
     880250-82-8P 880250-83-9P
                                                380250-87-3P
                                 880250-86-2P
     880250-88-4P
                    880250-89-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of imidazo[1,2-a]pyridin-3-imines and related compds. as mGLur5
        receptor modulators)
     880250-84-0P, N-tert-Butyl-2-[5-[(6-methylp/ridin-2-
TT
     yl)ethynyl]thiophen-2-yl]imidazo[1,2-a]pyra:in-3-amine
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of imidazo[1,2-a]pyridin-3-umines and related compds. as mGLur5
        receptor modulators)
     880250-84-0 CAPLUS
RN
CN
     Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimet \( \)\)\ 12-[5-[(6-\)\]\ ethyl-2-
     pyridinyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)
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Hydrochloride 880248-34-0P, 3-[[5-[3-(tert-
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yl]imidazo[1,2-a]pyrazin-3-amine Hydrochloride 880248-48-6P,
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yl]imidazo[1,2-a]pyrazin-3-amine 880248-52-2P.
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yl]thiophen-2-yl]ethynyl]benzonitrile Hydrochloride 880248-57-7P
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amine 880248-59-9P 880248-60-2P, 2-[5-[[3-(1H-Pyrrol-1-
yl)phenyl]ethynyl]thiophen-2-yl]-N-tert-butyl midazo[1,2-a]pyrazin-3-amine
Hydrochloride 880248-61-3P, 2-[5-[(1H-Indol-4)
yl)ethynyl]thiophen-2-yl]-N-tert-butylimidazo[1,2-a]pyrazin-3-amine
Hydrochloride 880248-62-4P, N-tert-Butyl-2-[5-[(3-
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Hydrochloride 880248-63-5P, N-tert-Butyl-2-[5-[(4-
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Hydrochloride 880248-64-6P, N-tert-Butyl-2-[5 (thiazol-4-
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N-tert-Butyl-2-[5-[(3-fluoropyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
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a]pyrazin-3-amine Hydrochloride 880248-77-1P,
N-tert-Butyl-2-[5-[(6-fluoropyridin-2-yl)ethynyl]thiophen-2-yl]imidazo[1,2-
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880249-61-6P, N-Cyclopentyl-2-[3-[(6-methylpyricin-2-
yl)ethynyl]phenyl]imidazo[1,2-a]pyrazin-3-amine 880249-63-8P,
N-Cyclohexyl-2-[3-[(6-methylpyridin-2-yl)ethyny]]phenyl]imidazo[1,2-
a]pyrazin-3-amine 880249-64-9P, N-(4-Fluorophenyl)-2-[3-[(6-
methylpyridin-2-yl)ethynyl]phenyl]imidazo[1,2-a]pyrazin-3-amine
880250-34-0P, N-Methyl-2-[5-(pyridin-2-ylethynyl)thiophen-2-
yl]imidazo[1,2-a]pyrazin-3-amine 880250-44-2P,
tert-Butyl[2-[5-(3-trifluoromethoxyphenylethyny])thiophen-2-yl]imidazo[1,2-
a]pyrazin-3-yl]amine 880250-72-6P, N-tert-Butyl-8-methyl-2-[5-
(pyridin-2-ylethynyl)thiophen-2-yl]imidazo[1,2-a]pyrazin-3-amine
Hydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of imidazo[1,2-a]pyridin-3-amines and related compds. as mGLur5
   receptor modulators)
880238-42-6 CAPLUS
Imidazo[1,2-a]pyrazin-3-amine, N-cyclopentyl-2-[5-(phenylethynyl)-2-
thienyl] - (9CI) (CA INDEX NAME)
```

RN

CN

RN 880239-39-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(cyclohexylmethyl)-2-[5-(1-propynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880240-65-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-[(4-methoxyphenyl)methyl]-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880240-79-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880241-88-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-[(3-methoxyphenyl)methyl]-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880242-57-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1-phenylethyl)-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880244-30-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(3-methoxyphenyl)-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880245-97-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[4-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880246-11-7 CAPLUS

CN Imidazo[1,2-a]pyrazia-3-amine, 2-[5-(phenylethynyl)-2-thienyl]-N-(1,1,3,3-

tetramethylbutyl) - (9CI) (CA INDEX NAME)

RN 880246-23-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine N-butyl-2-[4-(phenylethynyl)-2-thienyl]-(9CI) (CA INDEX NAME)

RN 880246-48-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine 2-[5-(2-pyridinyl)-2-thienyl]-N-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

RN 880246-61-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine 2-[5-(4-pyridinylethynyl)-2-thienyl]-N-(1,1,3,3-tetramethylbutyl)-()CI) (CA INDEX NAME)

RN 880247-03-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine 2-[5-(2-pyridinylethynyl)-2-thienyl]-N-(1,1,3,3-tetramethylbutyl)- (3CI) (CA INDEX NAME)

RN 880247-16-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N,N-dimethyl-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880247-31-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-methyl-2-[5-(phenylethynyl)-2-thienyl]-(9CI) (CA INDEX NAME)

RN 880247-45-0 CAPLUS

CN Acetamide, N-[2-[5-(phenylethynyl)-2-thienyl]imidazo[1,2-a]pyrazin-3-yl]-(9CI) (CA INDEX NAME)

RN 880247-59-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-ethyl-2-[5-(phenylethynyl)-2-thienyl]-(9CI) (CA INDEX NAME)

NHEt

RN 880247-73-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, :-[5-(phenylethynyl)-2-thienyl|-N-propyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & \text{NHPr-n} \\
\hline
N & \text{S} & \text{C} & \text{EC-Ph}
\end{array}$$

RN 880247-82-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 1-butyl-2-[5-(phenylethynyl)-2-thienyl](9CI) (CA INDEX NAME)

RN 880247-83-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(2-methylpropyl)-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME,

RN 880247-84-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 1-pentyl-2-[5-(phenylethynyl)-2-thienyl](9CI) (CA INDEX NAME)

RN 880247-85-8 CAPLUS

CN Glycine, N-(2-methoxy-2-oxoethyl)-N-[2-[5-(phenylethynyl)-2-thienyl]imidazo[1,2-a]pyrazin-3-yl]-, methyl ester (9CI) (CA INDEX NAME)

RN 880247-86-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-(phenylethynyl)-2-thienyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 880247-87-0 CAPLUS

CN Glycine, N-[2-[5-(phenyle:thynyl)-2-thienyl]imidazo[1,2-a]pyrazin-3-yl]-, methyl ester (9CI) (CA NDEX NAME)

RN 880247-88-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(4-pyridinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880247-89-2 CAPLUS

CN Imic 120[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(2-pyrilinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880217-90-5 CAPLUS

CN Benzamide, N-[2-[5-(phenylethynyl)-2-thienyl]imidazo[1,2-a]pyra:in-3-yl]-(9Cl) (CA INDEX NAME)

RN 880217-91-6 CAPLUS

CN Imid zo[1,2-a]pyrazin-3-amine, N-methyl-2-[5-(phenylethynyl)-2-thienyl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

RN 880217-92-7 CAPLUS

CN Propanamide, 2,2-dimethyl-N-[2-[5-(phenylethynyl)-2-thienyl]imidazo[1,2-a]pyrazin-3-yl]- (9CI) (CA INDEX NAME)

RN 880217-93-8 CAPLUS

Ch Benzamide, 3-methoxy-N-[2-5-(phenylethynyl)-2-thienyl]inidazo[1,2-a]pyrazin-3-yl]- (9CI) (C. INDEX NAME)

RN 880247-94-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-am ne, N-(1,1-dimethylethyl)-2-[5-(3-pyridinylethynyl)-2-thieny]- (9CI) (CA INDEX NAME)

RN 880247-95-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-am:ne, 2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880247-96-1 CAPLUS

CN Imidazo[1,2-a]pyrazine-8-carboxylic acid, 2-[5-(phenylethynyl)-2-thienyl]-3-[(1,1,3,3-tetramethylbutyl)amino]-, methyl ester (9CI) (CA INDEX NAME)

RN 880247-98-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[(6-methyl-2-pyridinyl)ethyny]-2-thienyl]-N-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)

RN 880247-99-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-cyclohexyl-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-00-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 2-[5-(phenylethynyl)-2-thienyl]-3-(1-pipe idinyl)-(9CI) (CA INDEX NAME)

RN 880248-01-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-N-methyl-2-[;-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-03-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-2-pyridinylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-05-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N,N-diethyl-2-[5-(phenylethynyl)-2-thienyl](9CI) (CA INDEX NAME)

RN 880248-07-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-phenylethynyl)-2-furanyl]- (9CI) (CA INDEX NAME)

RN 880248-10-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-methyl-2-[5-(phenylethyny])-2-thienyl]-N-(1,1,3,3-tetramethylbutyl)-, monohydrochloride (9CI) (CA ]NDEX NAME)

RN 880248-11-3 CAPLUS
CN Imidazo[1,2-a]pyrazine, 2-[5-(phenylethynyl)-2-thienyl]-3-(1-pyrrol dinyl), monohydrochloride (9CI) (CA INDEX NAME)

### ● HCl

RN 880248-12-4 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(4-fluorophenyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 880248-16-8 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(3-fluorophenyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$C = C$$

RN 880248-17-9 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(2-fuorophenyl)ethynyl]-2-thienyl)-, monohydrochloride (9CI) CA INDEX NAME)

# HCl

RN 880248-18-0 CAPLUS
CN Inidazo[1,2-a]pyrazine-8-carboxylic acid, 3-[(1,1-dimethylethyl)amino]-2[5-(phenylethynyl)-2-thienyl]-, methyl ester (9CI) (CA INDE) NAME)

RN 880248-19-1 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(pyrazinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-20-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[(4-aminophenyl)ethynyl]-2-thieny]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NA4E)

RN 880248-21-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1-meth/lethyl)-2-[5-(phenylethynyl) 2-thienyl]- '9CI) (CA INDEX NAME)

RN 880248-22-€ CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-diaethylethyl)-2-[5-(2-thienylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & \text{NHBu-t} \\
N & \text{N} & \text{C} \\
N & \text{N}
\end{array}$$

● FC1

RN 880248-23-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[3-(2-pyridinylethynyl)phenyl]- (9CI) (CA INDEX NAME)

RN 880248-24-E CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(2-methoxypher.yl)ethynyl]-2-thienyl]-, monomydrochloride (9CI) (CA INDEX

NAME)

● HCl

RN 880248-25-9 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(3-methoxyphenyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) ((A INDEX NAME)

● HCl

RN 880248-26-0 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(4-methoxyphenyl)ethynyl]-2-thienyl] -, monohydrochloride (9CI) ((A INDEX NAME)

● HCl

RN 880248-28-2 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[4-(2-pyridinylethynyl)phenyl]- (9CI) (CA INDEX NAME)

RN 880248-29-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dime:hylethyl)-2-[3-[(6-methyl-2-pyridinyl)ethynyl]phenyl]- (9CI) (CA INDEX NAME)

RN 880248-30-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[2-methyl-6-(phenylethynyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

RN 880248-31-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(2-pyridinylethynyl)-2-furanyl]- (9CI) (CA INDEX NAME)

RN 880248-32-8 CAPLUS

CN Imidazo[1,2-a]pyrazine-8-carboxylic acid, 3-[(1,1-dimethylethyl)amino]-2-[5-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-33-9 CAPLUS

CN Phenol, 4-[[5-[3-[(1,1-dimethylethy )amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# HCl

RN 880248-34-0 CAPLUS

CN Phenol, 3-[[5-[3-[(1,1-dimethylethy )amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

RN 880248-35-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5 [(3-aminophenyl)ethynyl]-2-thienyl]-N-(1,1-dimethylethyl)-, monohydrochlo:ide (9CI) (CA INDEX NAME)

# ● HCl

RN 880248-36-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5 [(2-aminophenyl)ethynyl]-2-thienyl]-N-

(1,1-dimethyletnyl)-, monohydrochloride (9CI (CA INDEX NAME)

HCl

RN 880248-38-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethrlethyl)-2-[6-(phenylethynyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

RN 880248-39-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimeth)lethyl)-2-[5-(4-pyridinylethynyl)-2-thienyl]-, monohydrochlo:ide (9CI) (CA INDEX NAME)

● HCl

RN 880248-40-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[(6-amino-3-pyridinyl)ethynyl]-2-thienyl]-N-(1,1-dimethylethyl)-, monohydroch oride (9CI) (CA INDEX NAME)

### HCl

RN 880248-41-9 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1 dimethylethyl)-2-[5-(2-pyrimidinylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 880248-42-0 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1 dimethylethyl)-2-[5-[(4-methyl-2-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

### HCl

RN 880248-43-1 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1 dimethylethyl)-2-[5-[(5-methyl-2-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 880248-45-3 CAPL'JS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(2-thiazolylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

NHBu-t 
$$C \equiv C = C$$

$$NH_2$$
 $N \longrightarrow N$ 
 $C \equiv C \longrightarrow N$ 

## ● HCl

$$\begin{array}{c|c} & \text{NHBu-t} \\ & \text{N} & \text{S} \\ & \text{N} & \text{N} \end{array}$$

● HCl

RN 880248-48-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[(6-amino-2-pyridinyl)ethynyl]-2-thienyl]-\lambda-(1,1-dimethylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 880248-49-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[[2-(methylthio)phenyl]ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-50-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[4-(phenylethynyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 880248-51-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(3-methylphenyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-52-2 CAPLUS

CN Benzonitrile, 3-[[5:[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethyr./l]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

- RN 880248-54-4 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[6-(phenylethynyl)-2-pyridinyl]-, monchydrochloride (9CI) (CA INDEX NAME)

● HCl

- RN 880248-55-5 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-N-methyl-2-[5-(2-pyridinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

- RN 880248-56-6 CAPLUS
- CN Benzonitrile, 4-[[5-[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 880248-57-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(1H-indol-6-ylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

RN 880248-58-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[2-(phenylethyny])-5-thiazolyl]- (9CI) (CA INDEX NAME)

RN 880248-59-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(6-quinolinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-60-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[[3-(1H-pyrrol-1-yl)phenyl]ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 880248-61-3 CAPLUS
CN Imidazo[1,2-a]pyrazin 3-amine, N-(1,1-dimethylethyl)-2-[5-(1H-indol-4-ylethynyl)-2-thienyl], monohydrochloride (9CI) (CA INDEX NAME)

### ● HCl

RN 880248-62-4 CAPLUS
CN Imidazo[1,2-a]pyrazin 3-amine, N-(1,1-dimethylethyl -2-[5-[(3-nitrophenyl)ethynyl]-1-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

NHBu-t 
$$C = C - NO_2$$

### ● HCl

RN 880248-63-5 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(4-nitrophenyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 880248-64-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimeth/lethyl)-2-[5-(4-thiazolylethynyl)-2-thienyl]-, monohydrochlocide (9CI) (CA INDEX NAME)

● HCl

RN 880248-65-7 CAPLUS

CN Phenol, 2-[[5-[3-[(1,1-dimethylethyl)amino]inidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

RN 880248-66-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[[3-(aminomethyl)phenyl]ethynyl]-2-thienyl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

RN 880248-67-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-([1,1'-biphenyl]-3-ylethynyl)-2-thienyl]-N-(1,1-dimethylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

RN 880248-68-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(3-thienylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 880248-69-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[[3-(dimethylamino)phenyl]ethynyl]-2-thienyl]-N-(1,1-dimethylethyl)-, monohydrochloride (9:I) (CA INDEX NAME)

## ● HCl

RN 880248-70-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(6-methyl-2-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 880248-71-5 CAPIUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(3-fluoro-2-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} NHBu-t & F \\ \hline N & N & C \end{array} \equiv C \begin{array}{c} T \\ \hline N \\ N \end{array}$$

● HCl

RN 880248-72-6 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[[3-(methylamino)pheryl]ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-73-7 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(4-methylphenyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

FN 880248-74-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-arine, N-(1,1-dimethylethyl)-2-[5-[(2-methylphenyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

FN 880248-75-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[4-methyl-5-(phenylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$C = C - Ph$$

Me

● HCl

RN 880248-76-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[4-methyl-5-(2-pyridinylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-77-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(6-fluoro-2-pyridinyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-78-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(2-nitrophenyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-79-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-chloro-N-(1,1-dimethylethyl)-2-[5-(2-pyridinylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-80-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(6-methoxy-2-pyridinyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-81-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(5-fluoro-2-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

## HCl

RN 880248-82-8 CAPLUS

CN Benzeneacetonitrile, 4-[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-(phenylethynyl)- (9CI) (CA INDEX NAME)

RN 880248-83-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(5-methoxy-3-pyridinyl)ethynyl]-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-84-0 CAPLUS

CN 3-Pyridinecarbonitril 2, 5-[[5-[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-thi =nyl]ethynyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 880248-85-1 CAPLUS

CN Imidazo[1,2-a]pyrazin·3-amine, N-(1,1-dimethylethyl)-2-[5-[[3-(methylthio)phenyl]et nynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880248-86-2 CAPLUS

CN Benzoic acid, 3-[[5-[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl!-, methyl ester (9CI) (CA INDEX NAME)

RN 880248-87-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[5-[(3,5-difluoro-2-pyridiryl)ethynyl]-2-thienyl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

RN 880248-88-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-(rhenylethynyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 880248-89-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[2-(4-pyridinylethynyl)-5-thiazolyl]- (9CI) (CA INDEX NAME)

RN 880248-90-8 CAPLUS

CN Benzaldehyde, 3-[[5-[3-[(1,1-dimethylethyl)amino]imidazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]- (9CI) (CA INDEX NAME)

RN 880248-91-9 CAPLUS

CN Benzonitrile, 3-[[5-[3-(1,1-dimethylethyl)amino]imicazo[1,2-a]pyrazin-2-yl]-2-thienyl]ethynyl]---fluoro-(9CI) (CA INDEX NAME)

RN 880248-92-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3 amine, N-(1,1-dimethylethyl)-2-[5-[[3-(trifluoromethyl)phenyl:ethynyl]-2-thienyl]-, monohycrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-93-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3 amine, N-(1,1-dimethylethyl)-2-[2-(2-pyridinylethynyl)-5-thiazolyl]- (9CI) (CA INDEX NAME)

RN 880248-94-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[3-methyl-5-(phenylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

1 HBu-t

● HCl

RN 88C248-95-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N (1,1-dimethylethyl)-2-[3-methyl-5-(2-pyridinylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 880248-96-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N (1,1-dimethylethyl)-2-[5-[(3-ethenylphenyl)ethynyl]-2-thienyl - (9CI) (CA INDEX NAME)

RN 880248-97-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N (1,1-dimethylethyl)-2-[5-(1H-imidazol-4-ylethynyl)-2-thienyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

- FN 880248-98-6 CAPLUS
- (N Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-2-[5-[(3-methyl-2-pyridinyl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

- FN 880248-99-7 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N,N-dimethyl-2-[5-(2-pyridinylethynyl)-2thienyl]- (9CI) (CA INDEX NAME)

- FN 880249-12-7 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylpentyl)-2-[4-(phenylethynyl)2-thienyl]- (9CI) (CA INDEX NAME)

- FN 880249-13-8 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N-(2-phenylethyl)-2-[4-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Fh-CH}_2\text{-CH}_2\text{-NH} \\ \hline \\ N \\ \hline \end{array}$$

- RN 880249-14-9 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-amine, N-[2-(3-methoxyphenyl)ethyl]-2-[4-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ph-C = C \\ \hline \\ N \\ N- \\ \hline \end{array} \begin{array}{c} S \\ NH-CH_2-CH_2 \\ \hline \end{array} \begin{array}{c} OMc \\ OMc \\ \end{array}$$

RN 88024 3-15-0 CAPLUS

CN Imida zo[1,2-a]pyrazin-3-amine, 2-[--(phenylethynyl)-2-thienyl]-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX N/ME)

$$C = C - Ph$$
 $N \longrightarrow N$ 
 $S \longrightarrow C \longrightarrow C - Ph$ 
 $S \longrightarrow C \longrightarrow C \longrightarrow C \longrightarrow C \longrightarrow C$ 

RN 88024 3-17-2 CAPLUS

CN Imida zo [1,2-a] pyrazin-3-amine, N-(-,1-dimethylbutyl)-2-[5-(phenylethynyl)-2-thianyl]- (9CI) (CA INDEX NAME)

RN 88024 -- 18-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(cyclohexylmethyl)-2-[4-(phenylethynyl)-2-thien/l]- (9CI) (CA INDEX NAME)

RN 88024 - 19-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-[(2-methoxyphenyl)methyl;-2-[5-(phenylethynyl)-2-furanyl]- (9CI) (CA INDEX NAME)

RN 880249-24-1 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amire, N-cyclopentyl-2-[4-(pheny] thynyl)-2-thienyl]- (9CI) (CA INDEX RAME)

RN 880249-25-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amire, N-(1-phenylethyl)-2-[4-(phenylethynyl)-2-thienyl]- (9CI) (CA INDEX / AME)

RN 880249-26-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amile, N-(1,1-dimethylbutyl)-2-[4 (phenylethynyl)-2-thienyl]- (9CI) (CA INDE) NAME)

RN 880249-::8-5 CAPLUS

RN 880249-30-3 CAPLUS

CN Imidazo 1,2-a]pyrazin-3-amine, N-cyclohexyl-2-[3-(2-pyridin lethynyl)phenyl]- (9CI) (CA INDEX NAME)

RN 880249-51-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-[3-(2-pyridinylethynyl)phenyl]-N- 1,1,3,3-tetrame:hylbutyl)- (9CI) (CA INDEX NAME)

RN 880249-52-5 CAPLUS

CN \_midazo[1,2-a]pyrazin-3-amine, N-cyclopentyl-2-[4-(2-pyridinylethynyl)phenyl] - (9CI) (CA INDEX NAME)

RN 880249-54-7 CAPLUS

CN midazo[1,2-a]pyrazin-3-amine, N-(4-fluorophenyl)-2-[4-(2-pyridinylethynyl)phenyl]- (9CI) (CA INDEX NAME)

RN 880249-55-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-cyclopentyl-2-[2-methyl-6-(phenylethynyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

$$Ph-C^{\underline{c}}\equiv C$$

$$N$$

$$N$$

$$N$$

$$N$$

$$N$$

RN 880249-56-9 CAPLUS

CN lmidazo[1,2-a]pyrazin-3-amine, N-cyclohexyl-2-[2-methyl-6-(phenylethynyl)-

3-pyridin 1]- (9CI) (CA INDEX NAME)

RN 880249-57 0 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N-cyclopentyl-2-[5-(2-pyridinylethyny.)-2-furanyl]- (9CI) (CA INDEX NAME)

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RN 880249-59 2 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N-cyclohexyl-2-[5-(2-pyridinylethynyl)-2-furanyl]- (9CI) (CA INDEX NAME)

$$R - C \equiv C - C \equiv C$$

RN 880249-60 5 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, 2-[5-(2-pyridinylethynyl)-2-furanyl]-\(\Lambda\)- (1,1,3,3-:etramethylbutyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \\ \text{} \\ \text{} \\ \text{} \\ \text{Me} & \\ \text{O} \\ \text{C} \end{array} \qquad \begin{array}{c} \text{C} \\ \text{Me} \\ \text{O} \\ \text{N} \end{array}$$

RN 88.)249-61-6 CAPLUS

CN Im\_dazo[1,2-a]pyrazin-3-amine, N-cyclopentyl-2-[3-[(6-methyl-2-pyridinyl)ethynyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 880249-63-8 CAPLUS

CN Im.dazo[1,2-a]pyrazin-3-amine, N-cyclohexyl-2-[3-[(6-methyl-2-py:idinyl)ethynyl]phenyl]- (9CI) (CA INDEX NAME)

RN 880249-64-9 CAPLUS

CN Im\_dazo[1,2-a]pyrazin-3-amine, N-(4-fluorophenyl)-2-[3-[(6-methyl-2-py:idinyl)ethynyl]phenyl]- (9CI) (CA INDEX NAME)

RN 880250-34-0 CAPLUS

CN Imidazo[1,2 a]pyrazin-3-amine, N-methyl-2-[5-(2-pyridinylethynyl)-2-thienyl]- (CA INDEX NAME)

RN 880250-44-2 CAPLUS

CN Imidazo[1,2 a]pyrazin-3-amine, N-(1,1-dim=thylethyl)-2-[5-[[3-(trifluoromethoxy)phenyl]ethynyl]-2-thien/l]- (9CI) (CA INDEX NAME)

RN 880250-72-6 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimethylethyl)-8-methyl-2-[5-(2-pyridinylethynyl)-2-thienyl]-, monohydroculoride (9CI) (CA INDEX NAME)

## ● HCl

RN 8802!.0-78-2 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, 2-(5-bromo-2-thienyl)-N-(1-phenylethyl)(9CI (CA INDEX NAME)

RN 880250-79-3 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, 2-(5-bromo-2-thienyl)-N-(1,1,3,3 tetramethylbutyl)- (9CI) (CA INDEX NAME)

RN 880250-82-8 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimet ylethyl)-2-[5-[(trimethylsi]yl)ethynyl]-2-thienyl]- (9CI) (CA INDEX NAME)

RN 880250-83-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, N-(1,1-dimet.:ylethyl)-2-(5-ethynyl-2thienyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITAT ONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1004749 CAPLUS

DOCUMENT NUMBER: 143:306338

TITLE: Preparation of imidazo[ ,2-a]pyrazine derivatives as

inhibitors of JNK kinases

INVENTOR(S): Birault, Veronique; Harris, Clifford John; Harrison,

Stephen Anthony

PATENT ASSIGNEE(S): Biofocus Discovery Limi ed, UK

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. CCUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND DATE         | APPL CATION NO.         | DATE        |  |  |  |
|---------------|-------------------|-------------------------|-------------|--|--|--|
|               |                   |                         |             |  |  |  |
| WO 2005085252 | Al 20050915       | WO 2005-GB842           | 20050304    |  |  |  |
| W: AE, AG, AL | , AM, AT, AU, AZ, | BA, BB, BG, BR, BW, BY, | BZ, CA, CH, |  |  |  |
| CN, CC, CR    | , CU, CZ, DE, DK, | DM, DZ, EC, EE, EG, ES, | FI, GB, GD, |  |  |  |

GE, GH, GM, HR, HU, ID, IL, [N, IS, JP, KE, KG, KP, KR, K], LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, N $\neq$ , NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SM, NO, NZ, OM, PG, PH, PL, PI, RO, RU, SC, SD, SE, SG, SK, SI, SM, SY, TJ, TM, TN, TR, TT, TZ, JA, UG, US, UZ, VC, VN, YU, Z, ZM, RW: BW, GH, GM, KE, LS, MW, MZ, VA, SD, SL, SZ, TZ, UG, ZM, Z\, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DI, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PI, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, G\, ML, MB, NE, SN, TD, TC MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: GB 2004-4889 A 20040304 A 20041130 GB 2004-26259

MARPAT 143:3063:3

OTHER SOURCE(S):

GI

$$\mathbb{R}^1$$
  $\mathbb{Z}_n$   $\mathbb{N}$   $\mathbb{N}$   $\mathbb{N}$ 

- Title compds. I [R1 = (un)substitute1 heteroaryl, arylalkyl, aryl, etc.; X AB = NHR2, NR2R3 or OR2; R2 and R3 independently = H, (un)substitutec heteroarylalkyl, heteroaryloxy, etc.; Z = NC(0), C(0)N, NS(0)2, etc.; n =0-1] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of JNK kinases. Thus, e.g., II was prepared by courling of 6,8-dibromo-imidazo[1,2-a]pyrazine (preparation given) with trans-4-aminocyclohexanol hydrochloride and subsequent amidation with thiophene-2-acetamide. The activity of I was evaluated in JNK screening assays and it was revealed that selected compds. of the invention displayed IC50 values in the range of less than 1  $\mu M$  up to 10  $\mu M$ . as inhibitor of JNK kinases should prove useful in the treatment  $\epsilon f$ diseases such as but not limited to rheumatoid arthritis, multiple sclerosis and asthma. Pharmaceutical compns. comprising I are disclosed. IC ICM C07D487-04
- ICS A61K031-437; A61P035-00
- CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63
- IT Mental and behavioral disorders

(attention deficit disorder; preparation of imidazo[1,2-a]pyrazine derivs.

as inhibitor: of JNK kinases) Alzheimer's disease IT Angiogenesis Anti-Alzheimer': agents Anti-ischemic acents Antiasthmatics Anticonvulsants Antidiabetic agents Antiobesity agents Antiparkinsonia: agents Antirheumatic acents Antitumor agents Anxiety Anxiolytics Asthma Atherosclerosis Autoimmune disease Cardiovascular agents Cardiovascular : ystem, disease Diabetes mellitus Epilepsy Human Inflammation Ischemia Learning disord∈rs Mammary gland, reoplasm Memory disorders Metabolic disorcers Multiple sclero∈is Neoplasm Nervous system, disease Obesity Ovary, neoplasm Pancreas, neoplasm Parkinson's dis∈ase Prostate gland, neoplasm Psoriasis Rheumatoid arthuitis Transplant rejection (preparation of imidazo[1,2-a]pyrazine der vs. as inhibitors of JNK kinases) 63744-22-9P TT 864546-04-3P 864546-05-4P 864! 46-06-5P RL: RCT (Reactart); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of imidazo[1,2-a]pyrazine der vs. as inhibitors of JNK kinases) 63744-22-9P 864546-05-4P

RL: RCT (Reactart); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imidazo[1,2-a]pyrazine der vs. as inhibitors of JNK kinases) 63744-22-9 CAPIUS

Imidazo[1,2-a]pyrazine, 6,8-dibromo- (9CI) (('A INDEX NAME) CN

IT

RN

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864546-0:-4 CAPLUS
RN
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Carbamic acid, (6-bromoimidazo[1,2-a]p/razin-8-yl)(cyclopropylmethyl)-, CN1,1-dime: hylethyl ester (9CI) (CA IND:X NAME)

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-(Bu-t
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REFERENCE COU! T:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL LITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

2005:1004722 CAPL JS ACCESSION NUM! ER:

DOCUMENT NUMBER:

143:306320

TITLE:

Preparation of dia yl-substituted triazole derivatives

as mGluR1 inhibito:s

INVENTOR (S):

Kawamoto, Hiroshi; Ito, Satoru; Satoh, Atsushi; Nagatomi, Yasushi; Hirata, Yukari; Kimura, Toshifumi;

Suzuki, Gentaroh; Gato, Akio; Ohta, Hisashi

PATENT ASSIGNEE(S):

Banyu Pharmaceutic 1 Co., Ltd, Japan

SOURCE:

PCT Int. Appl., 323 pp. CODEN: PIXXD2

DOCUMENT TYPE.

Patent

LANGUAGE:

Japanese

FAMILY ACC. NIM. COUNT:

PATENT INFORM/ TION:

| PATENT N(.    |                    |      |             | KIND DATE |     |     |                | APPL | ICAT: | ION I |            | DATE     |     |     |     |     |     |    |
|---------------|--------------------|------|-------------|-----------|-----|-----|----------------|------|-------|-------|------------|----------|-----|-----|-----|-----|-----|----|
| WO 20050{5214 |                    |      | A1 20050915 |           |     |     | WO 2005-JP4379 |      |       |       |            | 20050307 |     |     |     |     |     |    |
|               | W:                 | 1.E, | AG,         | AL,       | AM, | AT, | AU,            | AZ,  | BA    | BB,   | BG,        | BR,      | BW, | BY, | BZ, | CA, | CH, |    |
|               |                    | (N,  | co,         | CR,       | CU, | CZ, | DE,            | DK,  | DM    | DZ,   | EC,        | EE,      | EG, | ES, | FI, | GB, | GD, |    |
|               |                    | Œ,   | GH,         | GM,       | HR, | HU, | ID,            | IL,  | IN    | IS,   | JP,        | KE,      | KG, | KP, | KR, | KZ, | LC, |    |
|               |                    | 1 K, | LR,         | LS,       | LT, | LU, | LV,            | MA,  | MD    | MG,   | MK,        | MN,      | MW, | MX, | MZ, | NA, | NI, |    |
|               |                    | 1.0, | NZ,         | OM,       | PG, | PH, | PL,            | PT,  | RO    | RU,   | SC,        | SD,      | SE, | SG, | SK, | SL, | SM, |    |
|               |                    | ξŸ,  | TJ,         | TM,       | TN, | TR, | TT,            | TZ,  | UA    | UG,   | US,        | UZ,      | VC, | VN, | YU, | ZA, | ZM, | ZW |
|               | RW:                | FW,  | GH,         | GM,       | KE, | LS, | MW,            | MZ,  | NA    | SD,   | SL,        | SZ,      | TZ, | UG, | ZM, | ZW, | AM, |    |
|               |                    | 1Z,  | BY,         | KG,       | KZ, | MD, | RU,            | TJ,  | TM    | AT,   | BE,        | BG,      | CH, | CY, | CZ, | DE, | DK, |    |
|               |                    | ΙE,  | ES,         | FI,       | FR, | GB, | GR,            | HU,  | ΙE    | IS,   | IT,        | LT,      | LU, | MC, | NL, | PL, | PT, |    |
|               |                    | FO,  | SE,         | SI,       | SK, | TR, | BF,            | ВJ,  | CF    | CG,   | CI,        | CM,      | GA, | GN, | GQ, | GW. | ML. |    |
|               |                    | NR.  | NE,         | SN,       | TD. | TG  | •              | •    |       | •     | •          | •        | •   | •   |     | •   | •   |    |
| RIT           | RITY APPLA. INFO.: |      |             |           | •   |     |                |      |       | JP 2  | A 20040305 |          |     |     |     |     |     |    |
| CR SOURCE(5): |                    |      |             |           |     |     |                |      |       |       |            |          |     |     |     |     |     |    |

PRIO OTHE

GI

AB Title compds. represented by the formula I [wherein X1 = O, N or CR2; X2-X4, A1 = independently N or C; X5 = S or A4:A3; A2-A4 = independently CR4 or N; ring A = (hetero)cyclyl or (hetero)aryl; R2 = H, alkyl, cyano, alkyloxy(carbonyl) or trialkylsilyl; R4 = H, halo, alkyl(oxy), etc.; R3 = halo, alkyl(oxy), cyano, etc.; and pharmaceutically acceptable salts thereof] were prepared as mGluR1 (metabotropic Glutamate receptor 1) inhibitors. For example, II was given in a multi-step synthesis starting from 5-bromoindancie. II showed inhibition of mGluRla with an IC50 value of 2.3 nM. Thus, [ are useful for the prevention or treatment of convulsion, acute pains, inflammatory pains, chronic pains, brain disorders such as orain infarction or transient cerebral ischemic attack, mental function disorders such as schizophrenia, anxiety, drug dependence, Parkirson's disease, or gastrointestinal disorders (no data). IC ICM C07D249-06

ICS A61K031-4192; A61K031-427; A61K031-436; A61K031-437; A61K031-4375; A61K031-4439; A61K031-4709; A61K031-4725; A61K031-496; A61K031-498; A61K031-517; A61K031-5377; A61P001-06; A61P009-10; A61P025-04; A61P025-16; A51P025-18; A61P025-22; A61P025-28

CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

IT Analgesics

Anticonvulsants

Antiparkinsonian agents

Antipsychotics

Anxiety

TΤ

Anxiolytics

Convulsion

Digestive tract, cisease

Drug dependence

Parkinson's disease

## Schizophrenia

(preparation of diaryl-substituted triazole derivs. as mGluR1 inhibitors) 864863-68-3P 864363-69-4P 864863-70-7P 864863-71-8P 864863-72-9P 864863-77-4P 864863-73-0P 864363-75-2P 864863-76-3P 864863-79-6P 864863-80-9P 864363-81-0P 864863-82-1P 864863-83-2P 864863-84-3P 864863-85-4P 864363-86-5P 864863-87-6P 864863-88-7P 864863-89-8P 864863-97-8P 864863-92-3P 864363-93-4P 864863-96-7P 864863-98-9P 864863-99-0P 864364-00-6P 864864-01-7P 864864-02-8P 864864-03-9P 864864-04-0P 864364-05-1P 864864-06-2P 864864-07-3P 864864-08-4P 864864-09-5P 864364-10-8P 864864-11-9P 864864-12-0P 864864-14-2P 864864-15-3P 864364-16-4P 864864-18-6P 864864-20-0P 864864-23-3P 864364-25-5P 864864-24-4P 864864-26-6P 864864-27-7P 864864-28-8P 864864-29-9P 864364-30-2P 864864-33-5P 864864-31-3P 864864-32-4P 864864-34-6P 864364-35-7P 864864-36-8P 864864-37-9P 864864-38-0P 864364-40-4P 864864-39-1P 864864-41-5P 864864-42-6P 864864-43-7P

864864-46-0P

864864-44- P

IT

864864-45-9P

864864-50-6P

864864-49-3P

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864873-71-: P
RL: PAC (Plarmacological activity); SPN 'Synthetic preparation); THU
(Therapeut c use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of diaryl-substituted trazole derivs. as mGluR1 inhibitors)
622-37-7P
            1548-68-1P
                          2101-86-2P
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864867-21-0P 8648: 7-23-2P 864867-24-3P 864867-20-9P 864867-22-1P 864867-25-4P **864867-26-5P** 864867-27-6P 864867 28-7P 864867-30-1P 864867-31-2P 8648: 7-32-3P 864867-33-4P 864867-29-8P 8648t 7-37-8P 864867-34-5P 864867-35-6P 864867-36-7P 864867-38-9P 864867-41-4P 864867-39-0P 864867-40-3P 8648: 7-42-5P 864867-43-6P 864867-46-9P 864867-45-8P 8648 7-47-0P 864867-48-1P 864867-44-7P 864867-50-5P 8648f7-52-7P 864867-53-8P 864867-51-6P 864867-49-2P 864867-55-0P 864867-56-1P 8648(7-57-2P 864867-60-7P 864867-54-9P 864867-61-8P

RL: RCT (Reactant); 3PN (Synthetic preparation); FREP (Preparation); RACT (Reactant or reagent)

(preparation of claryl-substituted triazole delivs. as mGluR1 inhibitors) 864865-10-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP Preparation); USES (Uses)

(preparation of diaryl-substituted triazole derivs. as mGluR1 inhibitors) 864865-10-1 CAPLUS

Imidazo[1,2-a]pyrazine, 2-ethyl-6-[1-(2-fluoro-3-pyridinyl)-5-methyl-1H1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)

## IT 864867-26-5P

IT

RN

CN

RL: RCT (Reactant); 3PN (Synthetic preparation); FREP (Preparation); RACT (Reactant or reagent

(preparation of draryl-substituted triazole derivs. as mGluR1 inhibitors) RN 864867-26-5 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6-bromo-2-ethyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 4 OF 22 CAPL JS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:346791 CAPLUS

DOCUMENT NUMBER: 142:411376

TITLE: A preparation of imidazopyrazine derivatives, useful

as antiarrhythmics

INVENTOR(S): Plouvier, Bertrand M. C.; Fedida, David; Beatch,

Fregory N.; Chou, Doug Ta Hung; Yifru, Aregahegn S.;

Jung, Grace

PATENT ASSIGNEE(S): Lardiome Pharma Corporation, Can.

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. (OUNT:

PATENT INFORMATION:

| PATENT NO.           | KI     |                   |     |     | i   | APP", |      | DATE     |          |     |            |     |     |
|----------------------|--------|-------------------|-----|-----|-----|-------|------|----------|----------|-----|------------|-----|-----|
| WO 200503483         | <br>A  |                   |     |     |     | WO 2  | 004- |          | 20041008 |     |            |     |     |
| WO 200503483         |        |                   |     |     |     |       |      | 20012000 |          |     |            |     |     |
| W: AE, FG,           | AL, AM | , AT,             | AU, | ΑZ, | BA, | BB    | BG,  | BR,      | BW,      | BY, | ΒZ,        | CA, | CH, |
| CN, CO,              | CR, CU | , CZ,             | DE, | DK, | DM, | DZ    | EC,  | EE,      | EG,      | ES, | FI,        | GB, | GD, |
| GE, CH,              | GM, HR | , HU,             | ID, | IL, | IN, | IS    | JP,  | KE,      | KG,      | ΚP, | KR,        | ΚZ, | LC, |
| LK, IR,              | LS, LT | , LU,             | LV, | MA, | MD, | MG    | MK,  | MN,      | MW,      | MX, | MZ,        | NA, | NI, |
| NO, NZ,              | OM, PG | , PH,             | PL, | PT, | RO, | RU    | SC,  | SD,      | SE,      | SG, | SK,        | SL, | SY, |
| TJ, TM,              | TN, TR | , TT,             | TZ, | UA, | UG, | US    | UZ,  | VC,      | VN,      | YU, | ZA,        | ZM, | ZW  |
| RW: BW, CH,          | GM, KE | , LS,             | MW, | MZ, | NA, | SD    | SL,  | SZ,      | TZ,      | UG, | ZM,        | ZW, | AM, |
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| EE, ES,              | FI, FR | , GB,             | GR, | HU, | IE, | IT,   | LU,  | MC,      | NL,      | PL, | PT,        | RO, | SE, |
| SI, £K,              | TR, BF | , BJ,             | CF, | CG, | CI, | CM    | GA,  | GN,      | GQ,      | GW, | ML,        | MR, | NE, |
| SN, ID,              | TG     |                   |     |     |     |       |      |          |          |     |            |     |     |
| PRIORITY APPLN. INFO | .:     | US ::003-510010P  |     |     |     |       |      |          |          |     | P 20031008 |     |     |
| OTHER SOURCE(S):     | MA     | MARPAT 142:411376 |     |     |     |       |      |          |          |     |            |     |     |
| CI                   |        |                   |     |     |     |       |      |          |          |     |            |     |     |

GΙ

- AB The inventior relates to a preparation of midazopyrazine derivs. of formula I [wherein: R1, R2, R3, and R4 are independently selected from H, Br, Cl, F, NO2, CHF2, or (cyclo)alkyl, etc.; R5 is a substituted alkyl], useful as antiarrhythmics. For instance, imidazopyrazinone derivative II [IC50 (µM), ion-channels: Kv1.5 - 4.8, hERG - 100, H1Na - 340, Kv2.1 - 60] was prepared via amination of 1-phenyl-1-cyclopropylmethanol by imidazopyrazine derivative III with a yield of 42%.
- IC ICM A61K
- CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63
- IT AIDS (diseas∈)

(AIDS dementia complex, treatment of; preparation of imidazopyrazine derivs. useful as antiarrhythmics)

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IT
     Mental and behavioral disorders
        (AIDS dementia, treatment of; preparation of imicazopyrazine
        derivs. useful as a tiarrhythmics)
IT
     Mental and behavioral disorders
        (dementia, treatment of; preparation of imidazop razine derivs.
        useful as antiarrhy:hmics)
IT
     Mental and behavioral disorders
        (depression, treatment of; preparation of imidaze pyrazine derivs. useful as
        antiarrhythmics)
IT
     Allergy inhibitors
     Analgesics
     Anti-Alzheimer's agent;
     Anti-inflammatory agen:s
     Antiarrhythmics
     Antiasthmatics
     Anticonvulsants
     Antidepressants
     Antidiabetic agents
     Antihypertensives
     Antimigraine agents
     Antiparkinsonian agent;
     Antitussives
     Anxiolytics
     Cardiovascular agents
        (preparation of imilazopyrazine derivs. useful a: antiarrhythmics)
     Allergy
IT
     Alopecia
       Alzheimer's disease
     Anxiety
     Arthritis
     Asthma
     Autoimmune disease
     Cardiovascular system, disease
     Central nervous system disease
     Convulsion
     Cough
     Cystic fibrosis
     Diabetes mellitus
     Digestive tract, disease
     Eye, disease
     Hypercholesterolemia
     Hypertension
     Hypotension
     Inflammation
     Insomnia
     Multiple sclerosis
     Muscle, disease
     Myasthenia gravis
     Paralysis
     Parkinson's disease
     Psoriasis
     Respiratory system, di;ease
       Schizophrenia
     Seizures
     Sexual disorders
     Transplant rejection
     Ulcer
        (treatment of; preparation of imidazopyrazine derivs. useful as
        antiarrhythmics)
IT
     609-13-2P, 2-Bromo-3-o o-butyric acid ethyl ester
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                                                         110223-15-9P,
     2-Amino-3-benzyloxypyrazine
                                   112398-75-1P, N-Methyl-5-chloroindole
     408328-42-7P, 1-(4-Nitrophenyl)-cyclopropanecarbonitrile
     611240-68-7P, 8-Chloro-2-trifluoromethylimidazo[1,2-a]pyrazine
     850406-38-1P, 2 Methyl-7H-imidazo[1,2-a]pyrazin-8-one 850406-39-2P
     , 8-Chloro-2-is propylimidazo[1,2-a] pyrazine 850406-40-5P,
     8-Bromo-2-isopropylimidazo[1,2-a]pyrazine
                                               850406-41-6P,
     2-Isopropyl-7H-imidazo[1,2-a]pyrazin-8-one hydrochloride
     850406-42-7P, 8 Bromo-2-trifluoromethylimidazo[1,2-a]pyrazine
     850406-43-8P, 2 Trifluoromethyl-7H-imidazo[1,2-a]pyrazin-8-one
     hydrochloride 850406-44-9P, 2-Methyl-8-oxo-7,8-dihydro-imidazo[1,2-
     a]pyrazine-3-carboxylic acid ethyl ester 850406-45-0P,
     8-Oxo-2-trifluoromethyl-7,8-dihydro-imidazo[1,2-a]pyrazine-3-carboxylic
     acid ethyl ester
                       850406-46-1P, 1-(4-Trifluoromethylphenyl)-1-
                                 850406-47-2P, 1-(3,5-
     hydroxymethylcy:lopropane
     Bis(trifluoromethyl)phenyl)-1-hydroxymethylcyclopropane
                                                               850406-48-3P,
     [1-(5-Chloro-1-nethyl-1H-indol-3-yl)cyclopropyl]methanol
                                                                850406-49-4P,
     1-Methyl-5-chloso-3-[(dimethylamino)methyl]indole
                                                         850406-50-7P
     850406~51~8P, (1-Methyl-5-chloroindol-3-yl)acetonitrile
                                                               850406-52-9P,
     [1-(5-Chloro-1-methyl-1H-indol-3-yl)cyclopropyl]cyanide
                                                               850406-53-0P
     850406-54-1P, 2 (5-Chloro-1-methyl-1H-indol-3-yl)acetic acid
     850406-55-2P, 2 (5-Chloro-1-methyl-1H-indol-3-yl)ethanol
                                                                850406-56-3P,
     3-(5-Chloroindol-1-yl)propan-1-ol 850406-57-4P, 1-[(3-tert-
     Butyldimethylsilanyloxy)propyl]-5-chloro-1H-indole
     RL: RCT (Reactait); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of imidazopyrazine derivs. useful as antiarrhythmics)
IT
     85333-43-3P, 8-Chloro-2-methylimidazo[1,2-a]pyrazine
     611240-68-7P, 8-Chloro-2-trifluoromethylimidazo[1,2-a]pyrazine
     850406-39-2P, 8-Chloro-2-isopropylimidazo[1,2-a]pyrazine
     850406-40-5P, 8 Bromo-2-isopropylimidazo[1,2-a]pyrazine
     850406-42-7P, 8 Bromo-2-trifluoromethylimidazo[1,2-a]pyrazine
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of imidazopyrazine derivs. useful as antiarrhythmics)
RN
     85333-43-3 CAP_US
CN
     Imidazo[1,2-a]p/razine, 8-chloro-2-methyl- (9CI) (CA INDEX NAME)
```

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RN 611240-68-7 CAPLUS
CN Imidazo[1,2-a]pyrazine, 8-chloro-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)
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RN 850406-39-2 CAPLUS

CN Imidazo[1,2-a]pyrazine, 8-chloro-2-(1-methylethyl)- (CI) (CA INDEX NAME)

RN 850406-40-5 CAPLUS

CN Imidazo[1,2-a]pyrazine, 8-bromo-2-(1-methylethyl)- (9(1) (CA INDEX NAME)

RN 850406-42-7 CAPLUS

CN Imidazo[1,2-a]pyrazine, 8-bromo-2-(trifluoromethyl)- '9CI) (CA INDEX

L57 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:34601 CAPLUS

OOCUMENT NUMBER: 142:134621

TITLE: Preparation of aryl-substituted 8-aminoarylimidazo[1,2-

a]pyrazines as kinase inhibitors for treatment of

cancer and other conditions

INVENTOR(S): Sun, Connie Li; Liang, Congxin; Huang, Ping; Harris,

G. Davis; Guan, Huiping

PATENT ASSIGNEE(S): Sugen, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 119 pp., Cont.-in-part of U.S.

Ser. No. 781,928.

CODEN: USXXCO

OOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

Ι

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----US 2005009832 US 2004-845586 A1 20050113 20040514 US 2004-781928 US 2004220189 **A**1 20041104 20040220 US 2003-448114P P 20030220 PRIORITY APPLN. INFO.: US 2003-508860P P 20031007 US 2004-781928 A2 20040220

OTHER SOURCE(S):

MARPAT 142:134621

GT

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{2}$ 
 $R^{6}$ 

AB The title compds. I [wherein R1, R2 = H, (cyclo)alkyl, (hetero)aryl, etc.; R3, R4 = H, halo, (un)substituted (cyclo)alkyl, (hetero)aryl, etc.; R5 = H, halo, (un) substituted (hetero) aryl; wherein at least one of R4 and R5 = (hetero)aryl; R6 = H; or pharmaceutically acceptable salts and prodrugs thereof] were prepared as protein kinase (PK) inhibitors. For example, amination of 3,5-dibromoimidazo[1,2-a]pyrazine with methylamine in THF afforded (3-bromoimidazo[1,2-a]pyrazin-8-yl)methylamine (50%), which was coupled with phenylboronic acid in THF to give II (63%). Various assays which may be used to determine the level of activity of compds. I against one or more PKs (such as GST-Flk1 receptor tyrosine kinase, fibroblast growth factor type 1 receptors (FGFR1), and platelet-derived growth factor (PDGF) receptors) were described in detail (no data given). Thus, I and pharmaceutical compns. comprising these compds. are useful for treating disorders related to abnormal PK activity, such as cancer, diabetes, autoimmune disorders, inflammatory disorders, and cardiovascular disorders (no data).

IC ICM A61K031-498

ICS C07D487-04

INCL 514249000; 544350000

28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63

IT Neuroglia, neoplasm

(astrocytoma; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment of cancer and other conditions)

IT Neuroglia, neoplasm

(glioblastoma; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment of cancer and other conditions)

IT Angiogenesis

Angiogenesis inhibitors

Anti-inflammatory agents

Antiarthritics

Antidiabetic agents

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Antirheumatic agents
Antitumor agents
Autoimmune disease
Bladder, neoplasm
Cardiovascular system, dis:ase
Diabetes mellitus
Digestive tract, neoplasm
Fibrosis
Head and Neck, neoplasm
Head and Neck, neoplasm
Human
Immune disease
Immunomodulators
Inflammation
Lung, neoplasm
Mammary gland, neoplasm
Melanoma
  Neuroglia, neoplasm
Osteoarthritis
Ovary, neoplasm
Prostate gland, neoplasm
Psoriasis
Rheumatoid arthritis
   (preparation of imidazo[1,2-a]pyrazines as kinase in ibitors for treatment
   of cancer and other conditions)
274-79-3P, Imidazo[1,2-a]p/razine
                                    24241-18-7P,
(3,5-Dibromopyrazin-2-yl)a nine 63744-21-8P, 3,5-
Dibromoimidazo[1,2-a]pyraz ne 63744-22-9P, 6,8-
                                117718-82-8P, N-(3-Brome imidazo[1,2-
Dibromoimidazo[1,2-a]pyraz.ne
a]pyrazin-8-yl)methylamine
                           117718-83-9P, N-(3-Bromoim dazo[1,2-a]pyrazin-
                 117718-8;-1P, N-(6-Bromoimidazo[1,2-a pyrazin-8-
8-yl)ethylamine
yl)methylamine
                 117718-89 5P, N-(Imidazo[1,2-a]pyrazin 8-yl)methylamine
117718-92-0P, (3-Bromoimid 20[1,2-a]pyrazin-8-yl)amine
                                                         210907-84-9P
690636-28-3P, 4-[2-[4-(4,4 5,5-Tetramethyl-[1,3,2]dioxa]orolan-2-
yl)phenoxy]ethyl]morpholin:
                              756520-70-4P, 4-[2-[3-(4, ,5,5-Tetramethyl-
[1,3,2]dioxaborolan-2-yl)p nenoxy]ethyl]morpholine
                                                    787: 90-40-3P,
N-(3-Bromoimidazo[1,2-a]py azin-8-yl)butylamine
                                                 78759(-41-4P,
N-(3-Bromoimidazo[1,2-a]py azin-8-yl)isopropylamine
                                                      7:7590-42-5P,
N-(3-Bromoimidazo[1,2-a]py azin-8-yl)(cyclopropyl)amine
                                                          787590-43-6P,
Benzyl (3-bromoimidazo[1,2-1]pyrazin-8-yl)amine
                                                 787590 44-7P,
(3-Bromoimidazo[1,2-a]pyra:in-8-yl)[2-(morpholin-4-yl)ethyl]amine
787590-45-8P, 2-[(3-Bromoi iidazo[1,2-a]pyrazin-8-yl)amiro]ethanol
787590-56-1P, (3-Bromoimid 20[1,2-a]pyrazin-5-yl)dimethylamine
787591-39-3P
               787591-43-9
                              787591-44-0P
                                             787591-77-5 P,
N-(3,5-Dibromoimidazo[1,2-1]pyrazin-8-yl)methylamine
                                                      87591-78-0P,
N-(5-Bromoimidazo[1,2-a]py fazin-8-yl)methylamine
RL: RCT (Reactant); SPN (S'nthetic preparation); PREP (Freparation); RACT
(Reactant or reagent)
   (intermediate; preparation of imidazo[1,2-a]pyrazine: as kinase inhibitors
   for treatment of cancer and other conditions)
787590-47-0P, (3-Phenylimi lazo[1,2-a]pyrazin-8-yl)amine
                                                           787590-48-1P,
[3-(4-Aminophenyl)imidazo[.,2-a]pyrazin-8-yl]amine
                                                    78<sup>-</sup>590-51-6P,
(3-Bromoimidazo[1,2-a]pyra:in-8-yl)(4-methoxyphenyl)amile
787590-55-0P, (3-Bromoimid 20[1,2-a]pyrazin-8-y1)dimethylamine
RL: PAC (Pharmacological a:tivity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therape tic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactint or reagent); USES (Uses)
   (kinase inhibitor; preparation of imidazo[1,2-a]pyra; ines as kinase
   inhibitors for treatmen: of cancer and other conditions)
673857-28-8P, (6-Phenylimi lazo[1,2-a]pyrazin-8-yl)amine
                                                          787590-46-9P,
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TT

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Methyl (3-phenylimidazo[1,2-a]pyrazin-8-yl)amine
                                                  787590-49-2P,
N-[4-[8-[(4-Trifluo omethylbenzoyl)amino]imidazo 1,2-a]pyrazin-3-
yl]phenyl]-4-trifluoromethylbenzamide
                                       787590-5(-5P, N-[4-(8-
Aminoimidazo[1,2-a]pyrazin-3-yl)phenyl]-4-triflucromethylbenzamide
787590-52-7P, (4-Methoxyphenyl)(3-phenylimidazo[1,2-a]pyrazin-8-yl)amine
787590-53-8P, 4-(8-Methylaminoimidazo[1,2-a]pyra; in-3-yl)phenol
787590-54-9P, Dimet'nyl(3-phenylimidazo[1,2-a]pyr&zin-8-yl)amine
787590-57-2P, Isopropyl(3-phenylimidazo[1,2-a]pyrazin-8-yl)amine
787590-59-4P, 4-(8-!sopropylaminoimidazo[1,2-a]pyrazin-3-yl)phenol
787590-61-8P, Butyl (3-phenylimidazo[1,2-a]pyrazi: -8-yl)amine
787590-63-0P, Ethyl (3-phenylimidazo[1,2-a]pyrazir-8-yl)amine
787590-65-2P, [2-(Morpholin-4-yl)ethyl](3-phenylimidazo[1,2-a]pyrazin-8-
          787590-67-4P, Benzyl (3-phenylimidazo[1,2-a]pyrazin-8-yl) amine
787590-69-6P, 2-[(3 Phenylimidazo[1,2-a]pyrazin-{-yl)amino]ethanol
787590-70-9P, 1-But 1-3-(3-phenylimidazo[1,2-a]py razin-8-yl)urea
787590-71-0P, N-[3-{8-Methylaminoimidazo[1,2-a]p} razin-3-
yl)phenyl]acetamide
                      787590-72-1P, N-[4-[8-(Cyc]opropylamino)imidazo[1,2-
a]pyrazin-3-yl]phenvl]acetamide
                                  787590-73-2P, 2,6-Dimethyl-4-(8-
methylaminoimidazo[1,2-a]pyrazin-3-yl)phenol
                                               787590-74-3P,
[3-(4-Fluorophenyl) midazo[1,2-a]pyrazin-8-yl]amıne
                                                       787590-75-4P,
Cyclopropyl (3-pheny imidazo[1,2-a]pyrazin-8-yl) an ine
                                                        787590-76-5P,
N-[3-(4-Fluorophenyl)imidazo[1,2-a]pyrazin-8-yl] methylamine
787590-77-6P, Methy [3-(2-trifluoromethylphenyl); midazo[1,2-a]pyrazin-8-
yl]amine
           787590-78-7P, Methyl[3-(3-trifluoromethylphenyl)imidazo[1,2-
                       787590-79-8P, Methyl[3-(2-phenoxyphenyl)imidazo[1,2-
a]pyrazin-8-yl]amine
                       787590-80-1P, N-[3-(Bipheryl-2-yl)imidazo[1,2-
a]pyrazin-8-yl]amine
a]pyrazin-8-yl]methylamine
                             787590-81-2P, N-[3-:2-
Benzyloxyphenyl) imidazo[1,2-a]pyrazin-8-yl] methylamine
                                                          787590-82-3P,
1-[4-(8-Methylamino midazo[1,2-a]pyrazin-3-yl)ph\epsilon nyl]ethanone
787590-83-4P, 1-[3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl)phenyl]ethanone
                     787590-84-5P, N-[3-(3-Isoprcpylphenyl)imidazo[1,2-
a]pyrazin-8-yl]methylamine
                             787590-85-6P, N-[3-(4-tert-
Butylphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                     787590-86-7P,
N-[3-(4-Cyclohexylphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
787590-87-8P, N-[3-[3,5-Bis(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-8-
                787590-89-0P, 3-(8-Methylaminoinidazo[1,2-a]pyrazin-3-
yl]methylamine
                  787590-91-4P, 4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl)benzoic acid
yl)benzoic acid
                  787590-92-5P
                                 787590-93-6P, [4-(8-
Methylaminoimidazo[.,2-a]pyrazin-3-yl)phenyl]carlamic acid benzyl ester
787590-94-7P, Methy [3-(4-trifluoromethylphenyl)imidazo[1,2-a]pyrazin-8-
           787590-95-8P, N-[3-(2,4-Difluorophenyl)imidazo[1,2-a]pyrazin-8-
                 78"590-96-9P, N-[3-(3,4-Dichlorophenyl)imidazo[1,2-
yl]methylamine
a]pyrazin-8-yl]methylamine
                             787590-98-1P, N-[3-(3-Fluoro-4-
                                                       787590-99-2P,
methoxyphenyl) imida 20 [1,2-a] pyrazin-8-yl] methylamine
N-[3-(Biphenyl-4-yl imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                              787591-00-8P,
N-[3-(Biphenyl-3-yl.imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                              787591-01-9P,
N-[3-(4-Benzyloxyphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
787591-02-0P, Methyl[3-(naphthalen-1-yl)imidazo[1,2-a]pyrazin-8-yl]amine
787591-03-1P, N-[3-(2-Chlorophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
787591-04-2P, N-[3-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-
                      787591-05-3P, Methyl[3-(2-
yl]phenyl]acetamide
trifluoromethoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
                                                           787591-06-4P,
Methyl[3-(3-trifluoromethoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
787591-07-5P, Cyclopropyl[3-[3-[2-(morpholin-4-
yl)ethoxy]phenyl]imadazo[1,2-a]pyrazin-8-yl]amine
                                                     787591-08-6P,
3-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-y]]phenol
                                                            787591-09-7P,
Methyl[3-(4-trifluoromethoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
787591-10-0P, N-[3-{2-Fluorophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
787591-11-1P, N-[3-(3,4-Difluorophenyl)imidazo[1,2-a]pyrazin-8-
yl]methylamine 787591-12-2P, N-[3-(Benzodioxol-5-yl)imidazo[1,2-
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a]pyrazin-8-yl]methylamine
                             787591-13-3P, N-[3-(3-
Chlorophenyl) imidazo[1,2-a]p razin-8-yl] methylamine
                                                      7875 91-14-4P,
N-[3-(4-Methoxyphenyl)imidaz::[1,2-a]pyrazin-8-yl]methylamine
787591-15-5P, N-[3-(2-Methox phenyl)imidazo[1,2-a]pyrazin-3-yl]methylamine
787591-16-6P, Methyl[3-(4-ph:noxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
787591-17-7P, N-[3-(4-Benzyl::xy-3-fluorophenyl)imidazo[1,2-a]pyrazin-8-
                 787591-18-8', N-[3-(4-Isopropylphenyl)imidazo[1,2-
yl]methylamine
                           787591-19-9P, N-[3-[3,5-
a]pyrazin-8-yl]methylamine
Bis(trifluoromethyl)phenyl]i iidazo[1,2-a]pyrazin-8-yl](cyclopropyl)amine
787591-20-2P, Cyclopropyl [3- 3,4-dichlorophenyl) imidazo [1,2-a] pyrazin-8-
           787591-21-3P, 3-[--(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-
yl]benzoic acid
                  787591-22--P, Methyl[3-[4-[2-(morpholin-1-
yl)ethoxy]phenyl]imidazo[1,2 a]pyrazin-8-yl]amine
                                                    787591 -23-5P,
Cyclopropyl[3-[4-[2-(morphol n-4-yl)ethoxy]phenyl]imidazo[1,2-a]pyrazin-8-
yl]amine
          787591-24-6P, Cyc opropyl[3-(4-dimethylaminophenyl)imidazo[1,2-
a]pyrazin-8-yl]amine
                       78759 -25-7P, Cyclopropyl[3-(4-
phenoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
                                                 787591-26-8P,
1-[4-[8-(Cyclopropylamino)im dazo[1,2-a]pyrazin-3-yl]phenyl]ethanone
787591-27-9P, [4-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-
yl]phenyl]carbamic acid benzvl ester 787591-28-0P, N-[4-(8-
Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]acetamide
                                                         737591-29-1P,
N-[3-(3-Aminophenyl)imidazo[-,2-a]pyrazin-8-yl](cyclopropyl)amine
787591-30-4P, N-[3-(4-Aminophenyl)imidazo[1,2-a]pyrazin-8-/1]methylamine
787591-31-5P, Methyl[3-(naph:halen-2-yl)imidazo[1,2-a]pyrazin-8-yl]amine
787591-32-6P, 4-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazir.-3-yl]benzoic
acid
       787591-33-7P, N-[3-(4 Aminophenyl)imidazo[1,2-a]py1 azin-8-
yl](cyclopropyl)amine
                        787541-34-8P, Methyl[3-[3-[2-(morpholin-4-
yl)ethoxy]phenyl]imidazo[1,2 a]pyrazin-8-yl]amine
                                                   787591-36-0P,
N-[3-(3-Aminophenyl)imidazo[',2-a]pyrazin-8-yl]methylamine
                                                             787591-37-1P,
3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenol
                                                    787591-38-2P,
4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)-N-[2-(morpholin-4-
yl)ethyl]benzamide
                     787591-40-6P, 4-(8-Methylaminoimidazc[1,2-a]pyrazin-3-
yl) -N-[3-(morpholin-4-yl)propyl]benzamide 787591-41-7P,
4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)-N-[3-(pyrrolidin-1-
                     787591 42-8P, 1-[3-(8-Methylaminoimilazo[1,2-
yl)propyl]benzamide
a]pyrazin-3-yl)phenyl]-3-[3- morpholin-4-yl)propyl]urea
                                                          787591-45-1P
787591-46-2P
               787591-47-3P
                             787591-48-4P, 1-[4-(8-Methy]aminoimidazo[1,2-
a]pyrazin-3-yl)phenyl]-3-[3- morpholin-4-yl)propyl]urea
                                                          787591-49-5P
787591-50-8P 787591-51-9P, 1-[4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl)phenyl]-3-[3-(pyrrolidin-1-yl)propyl]urea
                                               787591-52-02,
4-(Pyrrolidin-1-yl)piperidine-1-carboxylic acid N-[4-(8-
methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]amide
                                                    787591-54-2P,
1-[4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]-3-[2-(morpholin-4-
                787591-56-4P, 4-Hydroxypiperidine-1-carbox/lic acid
yl)ethyl]urea
N-[4-(8-methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]amide
                                                             787591-57-5P,
4-Hydroxypiperidine-1-carboxylic acid N-[3-(8-methylaminoinidazo[1,2-
a]pyrazin-3-yl)phenyl]amide 787591-58-6P, 1-[3-(8-Methylaminoimidazo[1,2-
a]pyrazin-3-yl)phenyl]-3-[2- morpholin-4-yl)ethyl]urea
                                                         737591-59-7P,
1-[3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]-3-[2-(pyrrolidin-1-
               787591-61-1P, 1-[3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl)ethyl]urea
yl)phenyl]-3-[3-(pyrrolidin-1-yl)propyl]urea
                                               787591-63-32
                                                              787591-65-5P
787591-66-6P, 1-[4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]-3-[2-
(pyrrolidin-1-yl)ethyl]urea
                              787591-68-8P
                                             787591-70-2P,
1-[4-[8-(Cyclopropylamino)im:dazo[1,2-a]pyrazin-3-yl]phenyl]-3-[3-
(pyrrolidin-1-yl)propyl]urea
                               787591-72-4P, 1-[4-[8-
(Cyclopropylamino) imidazo [1, 2-a] pyrazin-3-yl] phenyl] -3-[3-(morpholin-4-
                 787591-74-6P, 1-[4-[8-(Cyclopropylamino)i midazo[1,2-
yl)propyl]urea
a]pyrazin-3-yl]phenyl]-3-[2- pyrrolidin-1-yl)ethyl]urea
                                                          787591-75-7P,
1-[4-[8-(Cyclopropylamino)im:dazo[1,2-a]pyrazin-3-yl]phenyl]-3-[2-
(morpholin-4-yl)ethyl]urea 787591-76-8P, N-[5-(4-
```

Fluorophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamin€

IT

787591-79-1P,

Methyl (5-phenylimidazo[1,2-a]pyrazin-8-yl)amine 37591-81-5P, Methyl[5-(thiophen-3-yl)imidazo[1,2-a]pyrazin-8-yl]amine 787591-82-6P, 4-(8-Methylaminoimidazo[1,2-a]pyrazin-5-yl)phenol 787591-83-7P, N-[4-(8-Methylaminoimidazo[1,2-a]pyrazin-5-yl)phenyl]acetamide 787591-84-8P, N-[3,5-Bis(4-fluorophenyl)imidazo[1,2-a]pyrazin-8-787591-85-9P, N-(3,5-Diphenylimidazo[1,2-a]pyrazin-8-787591-86-0P, Methyl(6-phenylimidazo[1,2-a]pyrazin-8yl]methylamine yl) methylamine yl)amine 787591-87-1P, 4-(8-Methylaminoimidazo[1,2-a]pyrazin-6-yl)phenol 787591-88-2P, Dimethyl(3-phenylimidazo[1,2-a]pyrazia-5-yl)amine RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Freparation); USES (Uses) (kinase inhibitor; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment of cancer and other corditions) 75-31-0, Isopropylamine, reactions 76-09-5, Pinacol 98-80-6, Phenylboronic acid 100-46-9, Benzylamine, reactions 104-94-9, 109-73-9, Butylamine, reactions 111-36-4, Butyl isocyanate Anisidine 123-75-1, Tyrrolidine, reactions 123-00-2, 4-(3-Aminopropyl)morpholine 329-15-7, 4-(Trifluoromethyl)benzoyl chloride 543-27-1, Isobutyl chloroformate 765-30-0, Cyclopropylamine 1423-25-3 [3-(Trifluoromethyl)phenyl]boronic acid 1423-27-4, [2-1765-93-1, 4-Fluorophenylboronic (Trifluoromethyl)phenyl]boronic acid acid 1993-03-9, 2-Fluorophenylboronic acid 2032-35-1, 2038-03-1, [2-(Norpholin-4-Bromoacetaldehyde diethyl acetal 3647-69-6, 4-(2-Chloroethyl) morphcline monohydrochloride yl)ethyl]amine 3900-89-8, 2-Chlorophenylboronic acid 4688-76-0, (2-Phenylphenyl)boronic 5122-94-1, Bipheryl-4-ylboronic acid 5049-61-6, Aminopyrazine 5122-95-2, Biphenyl-3-ylboronic acid 5720-06-9, 2-Methoxyphenylboronic acid 5720-07-0, 4-Methoxyphenylboronic acid 6165-68-0, 6165-69-1, Thiophen-3-ylboronic acid 2-Thiopheneboronic acid 13922-41-3, Naphthalen-1-ylboronic acid 14047-29-1, 4-Carboxyphenylboronic acid 16152-51-5, 4-Isopropylphenylboronic acid 16419-60-6, 2-Methylphenylboronic acid 16732-70-C 17596-79-1 28611-39-4, (4-25487-66-5, 3-Carboxyphenylboronic acid Dimethylaminophenyl)boronic acid 30418-59-8, 3-Aminophenylboronic acid 32316-92-0, Naphthalen-2-ylboronic acid 51067-38-0, 4-Phenoxyphenylboronic acid 52488-36-5, 4-Bromoindcle 63503-60-6, 3-Chlorophenylboronic acid 73852-19-4, [3,5-Bis(trifluoromethyl)phenyl]boronic acid 78887-39-5, 3-Acetylaminophenylboronic acid 87199-18-6, 3-Hydrcxyphenylboronic acid 94839-07-3, 3,4-Methylenedioxyphenylboronic acid 108238-09-1, 2-Phenoxyphenylboronic acid 123324-71-0, 4-tert-Eutylphenylboronic acid 128796-39-4, (4-Trifluoromethylphenyl)boronic acid 133057-83-7, 3-Fluoro-4-benzyloxyphenylboronic acid 144025-03-6, (2,4-Difluorophenyl)boronic acid 146631-00-7, 4-Benzyloxyphenylboronic acid 149104-90-5, 4-Acetylphenylboronic acid 149507-26-6, (3-Fluoro-4-methoxyphenyl)boronic acid 151169-75-4, (3,4-Dichlorophenyl)boronic acid 168267-41-2, (3,4-Difluorophenyl)boronic acid 175676-65-0, (2-Trifluoromethoxyphenyl)boronic acid 179113-90-7. (3-Trifluoromethoxyphenyl)boronic acid 204841-19-0, 3-214360-60-8, N-[4-(4,4,5,5-Tetramethyl-Acetylphenylboronic acid [1,3,2]dioxaborolan-2-yl)phenyl]acetamide 214360-73-3, [4-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2-yl)phenyl]amine 214360-76-6, 3-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2-yl)phenol 216019-28-2, 3-Isopropylphenylboronic acid 269409-70-3, 269409-70-3, 4-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2-yl)phenol 269410-25-5, 2,6-Dimethyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborclan-2-yl)phenol 363186-06-5, [4-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2yl)phenyl]carbamic acid benzyl ester 374538-04-2, 4-

C/clohexylphenylboronic acid 787591-35-9, [3-[2-(Morpholin 4y\_)ethoxy]phenyl]boronic acid <25630-84-0 R: RCT (Reactant); RACT (Reac ant or reagent) (preparation of imidazo[1,2 a]pyrazines as kinase inhibitors for treatment of cancer and other conditions) 338116-27-6P, 4-(4,4,5,5-Tetra: ethyl-[1,3,2]dioxaborolan-2-y )-1H-indole IT 736990-02-6P 825630-79-3P :25630-80-6P **825630-81-7P** 825630-82-8P 825630-83-9P 82 630-85-1P 825630-86-2P R:: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of imidazo[1,2 a)pyrazines as kinase inhibitors for treatment of cancer and other conditions) 274-79-3P, Imidazo[1,2-a]pyraz ne 63744-21-8P, IT 3 5-Dibromoimidazo[1,2-a]pyraz ne 63744-22-9P, 6 8-Dibromoimidazo[1,2-a]pyraz ne 787590-56-1P, (3-Bromoimidazo[1,2-a]pyrazin-'-yl)dimethylamine R's: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment of cancer and other conditions) 2/4-79-3 CAPLUS RN Imidazo[1,2-a]pyrazine (8CI, 9CI) (CA INDEX NAME) CN

RN 6.3744-21-8 CAPLUS CN Imidazo[1,2-a]pyrazine, 3,5-dilromo- (9CI) (CA INDEX NAME)

RN 63744-22-9 CAPLUS CN Imidazo[1,2-a]pyrazine, 6,8-dilromo- (9CI) (CA INDEX NAME)

Br N

Er

RN 787590-56-1 CAPLUS
CN Inidazo[1,2-a]pyrazin-5-amine, 3-bromo-N,N-dimethyl- (9CI) CA INDEX
NAME)

TRUE 787590-55-0P, (3-Bromoimidazo[1,2-a]pyrazin-8-yl)dimethylamine RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses

(kinase inhibitor; preparation of imidazo[1,2-a]pycazines as kinase inhibitors for treatment of cancer and other conditions)

RN 787590-55-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-8-amine, 3-bromo-N,N-dimethyl- (9CI) (CA INDEX NAME)

787590-54-9P, Dimethyl(3-phenylimidazo[1,2-a]pyrazin-3-yl)amine
787591-88-2P, Dimethyl(3-phenylimidazo[1,2-a]pyrazin-3-yl)amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(kinase inhibitor; preparation of imidazo[1,2-a]pycazines as kinase inhibitors for treatment of cancer and other conditions)

RN 787590-54-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-8-amine, N,N-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

RN 787591-88-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-5-amine, N,N-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

IT 825;30-84-0

RL: RCT (Reactant); RACT (Reactart or reagent)
 (preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment
 of cancer and other conditions)

RN 825330-84-0 CAPLUS

CN Carramic acid, (3-bromoimidazo[1 2-a]pyrazin-8-yl)methyl-, 1,1 dimethylethyl ester (9CI) ((A INDEX NAME)

IT 825530-81-7P 825630-82-8P 825630-83-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

preparation of imidazo[1,2-a,pyrazines as kinase inhibitors for treatment

preparation of imidazo[1,2-a,pyrazines as kinase inhibitors for treatment of cancer and other conditions)

RN 825;30-81-7 CAPLUS

CN Carpamic acid, [3-(4-aminophenyl,imidazo[1,2-a]pyrazin-8-yl]methyl-, 1,1 dimethylethyl ester (9CI) ((A INDEX NAME)

RN 825;30-82-8 CAPLUS

CN Carpamic acid, methyl[3-[4-[[(4-ritrophenoxy)carbonyl]amino]phenyl]imidazo [1,?-a]pyrazin-8-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDE). NAME)

RII 825630-83-9 CAPLUS

CII Carbamic acid, methyl[3-[4-[[[[(2S)-2-phenylpropyl]amin-]carbonyl]amino]ph enyl]imidazo[1,2-a]pyrazir-8-yl]-, 1,1-dimethylethyl esmer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L57 ANSWER 6 OF 22 CAPLUS CCPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:3074092 CAPLUS

DOCUMENT NUMBER: 142:45241

T.TLE: Substituted imidazolopyrazine and triazolopyrazine

derivative GABAA receptor ligands, their preparation,

pharmaceutical compositions, and therapeutic use Xu, Yuelian; Han, Bingsong; Xie, Linghong

INVENTOR (S):

PATENT ASSIGNEE(S): Neurocen Corporation, USA

SOURCE: PCT Irt. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.    |    |     |     | KIND DATE |      |                 | 1               | APPL | ICAT |     | DATE |     |          |     |     |     |     |
|---------------|----|-----|-----|-----------|------|-----------------|-----------------|------|------|-----|------|-----|----------|-----|-----|-----|-----|
| WO 2004107863 |    |     | A1  | -         | 2004 | <b></b><br>1216 | WO 2004-US13778 |      |      |     |      |     | 20040503 |     |     |     |     |
|               | W: |     |     |           |      |                 |                 |      |      |     |      | _   |          |     |     | CA, |     |
|               |    | -   | •   | -         | -    |                 |                 | -    | -    | •   | •    | -   | -        | -   | •   | GB, |     |
|               |    | GE, | GH, | GM,       | HR,  | HU,             | ID,             | IL,  | IN,  | IS, | JP,  | KE, | KG,      | KP, | KR, | KZ, | LC, |
|               |    | LK, | LR, | LS,       | LT,  | Ll,             | LV,             | MA,  | MD,  | MG, | MK,  | MN, | MW,      | MX, | MZ, | NA, | NI, |
|               |    | NO, | NZ, | OM,       | PG,  | Pŀ,             | PL,             | PT,  | RO,  | RU, | SC,  | SD, | SE,      | SG, | SK, | SL, | SY, |
|               |    | TJ, | TM, | TN,       | TR,  | TI,             | TZ,             | UA,  | ŪĠ,  | US, | UZ,  | VC, | VN,      | YŪ, | ZA, | ZM, | ZW  |

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     CA 2524376
                          AA
                                 2004121€
                                             CA 2004-2524376
                                                                     20040503
     EP 1619948
                          Α1
                                 20060201
                                             EP 2004-751255
                                                                     20040503
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
PRIORITY APPLN. INFO.:
                                             US 2003-468073P
                                                                  P 20030505
                                             WO 2004-US13778
                                                                  W 20040503
OTHER SOURCE(S):
                         MARPAT 142:49241
     Imidazolopyrazine and triazolopyrazine derivs. (preparation described) are
     provided which may be used to modulate ligand binding to GABAA receptors
     in vivo or in vitro, and are particularly useful in the treatment of a
     variety of central nervous system CNS) disorders in humans, domesticated
     companion animals, and livestock arimals. The compds. of the invention
     may be administered alone or in combination with one or more other CNS
     agents to potentiate the effects of the other CNS agent(s).
     Pharmaceutical compns. and methods for treating such disorders are
     provided, as are methods for using such ligands for detecting GABAA
     receptors (e.g., receptor localization studies).
     ICM A01N043-58
IC
     ICS
         A01N043-60; A61K031-495; A61K(31-50; C07D471-00; C07D487-00;
          C07D491-00; C07D495-00; C07D497-00
     1-11 (Pharmacology)
CC
     Section cross-reference(s): 9, 28, 63
     Mental and behavioral disorders
IT
        (attention deficit disorder; imidazolopyrazine and triazolopyrazine
        derivative GABAA receptor ligancs, preparation, pharmaceutical compns., and
        therapeutic use)
TT
     Mental and behavioral disorders
        (depression; imidazolopyrazine and triazolopyrazine derivative GABAA
        receptor ligands, preparation, pharmaceutical compns., and therapeutic use)
     Alzheimer's disease
IT
     Amnesia
     Anti-Alzheimer's agents
     Antidepressants
     Anxiety
     Anxiolytics
     Cognition enhancers
     Combination chemotherapy
     Drug delivery systems
     Human
     Nervous system agents
     Sleep disorders
        (imidazolopyrazine and triazolopyrazine derivative GABAA receptor ligands,
        preparation, pharmaceutical compns., and therapeutic use)
     808138-65-0P 808138-67-2P
                                  808138-69-4P
                                                 808138-75-2P
IT
     808138-77-4P
                    808138-85-4P
                                    808138-87-6P
                                                    808138-89-8P
     RL: BUU (Biological use, unclassified); PAC (Pharmacological activity);
     SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Lses)
        (imidazolopyrazine and triazolopyrazine derivative GABAA receptor ligands,
        preparation, pharmaceutical compns., and therapeutic use)
     808138-57-0
IT
     RL: BUU (Biological use, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (imidazolopyrazine and triazolopyrazine derivative GABAA receptor ligands,
        preparation, pharmaceutical compns., and therapeutic use)
```

## IT 808138-65-0P 808138-67-2P

RL: BUU (Biological use, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL Biological study); PREP (Preparation); USES (Uses)

(imidazolopyrazine and triazolopyrazine derivative GAB.A receptor ligands, preparation, pharmaceutical compns., and therapeutic u:e)

RN 808138-65-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 5-propyl-6-[[2-(2-pyridinyl)-1H-inidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

RN 808138-67-2 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6-[[2-(3-fluoro-2-pyridinyl)-1H-inidazol-1-yl]methyl]-5-propyl- (9CI) (CA INDEX NAME)

## IT 808138-57-0

RN

RL: BUU (Biological use, unclassified); PAC (Pharmacological activity);
THU (Therapeutic use); BIOL (Biological study); USES (Use:)
 (imidazolopyrazine and triazolopyrazine derivative GAB.A receptor ligands, preparation, pharmaceutical compns., and therapeutic use)
808138-57-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6-[[2-(6-fluoro-2-pyridinyl)-1H-inidazol-1-yl]methyl]-5-propyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

1

ACCESSION NU IBER: 2004:934327 CAPL JS

DOCUMENT NUM (ER: 141:395578

TITLE: Preparation of ar/l-substituted 8-aminoarylimicazo[1,2-

a)pyrazines as ki hase inhibitors for treatment of

cancer and other conditions

INVENTOR(S): Sun, Connie Li; Liang, Congxin; Huang, Ping; Harris,

G. Davis; Guan, Hiping

PATENT ASSIG (EE(S): Sugen, Inc., USA

SOURCE: U.S. Pat. Appl. Fibl., 76 pp.

CODEN: USXXCO

DOCUMENT TYP:: Patent LANGUAGE: English

FAMILY ACC. JUM. COUNT: 2

PATENT INFOR' LATION:

| PATENT .10.            | KIND         | DATE     | APPLICATION NO.    | DATE       |
|------------------------|--------------|----------|--------------------|------------|
|                        | <del>-</del> |          |                    |            |
| US 2004.20189          | A1           | 20041104 | US 2004-781928     | 2004(220   |
| US 2005 109832         | A1           | 20050113 | US 2004-845586     | 20040514   |
| PRIORITY APP N. INFO.: |              |          | US 2003-448114P    | 20030220   |
|                        |              |          | US 2003-508860P .I | 20031007   |
|                        |              |          | US 2004-781928 A   | 2 2004(220 |

OTHER SOURCE S): MARPAT 141:395578

Ι

GI

$$R^{1}$$
 $N$ 
 $R^{2}$ 
 $N$ 
 $R^{6}$ 
 $R^{3}$ 
 $R^{6}$ 
 $R^{5}$ 

Title compds. I [wherein R1, R2 = independently H, acyl, carbamoyl, AB alkoxy, (un) substituted (cyclo) alkyl, (hetero) aryl, etc.; R3, R4 = independently H, halo, OH, acyl, carbamoyl, alkoxy, sulfamoyl, CN, NO2, NH2, (u:i) substituted (cyclo) alkyl, (hetero) aryl, etc.; R5 = H, halc, (un) submittituted aryl; wherein at least one of R3, R4, and R5 = aryl; R6 = H; or pharmaceutically acceptable salts and prodrugs thereof] were prepared as protein kinase (PK) inhibitors. For example, amination of 3,5-dibromoimidazo[1,2-a]pyrazine with methylamine in THF afforded (3-bromoimidazo[1,2-a]pyrazin-8-yl)methylamine (50%), which was coupled with phenylboronic acid in THF to give II (63%). Nine exemplified compds. were tested and found active against 3ST-Flk1 receptor tyrosine kinase, fibroblast growth factor type 1 receptors (FGFR1), and platelet-derived growth :actor (PDGF) receptors (no data). Thus, I and pharmaceutical compns. comprising these compds. are useful for treating disorders related to abnormal PK activity, such as cancer, diabetes, autoimmune disorders, inflammatory disorders, and cardiovascular disorders (no data).

IC ICM A6 K031-498 ICS C0"D487-04

INCL 514249000; 544350000

CC 28-17 (Meterocyclic Compounds (More Tian One Hetero Atom)) Section cross-reference(s): 1, 63

```
IT
     seuroglia, neoplasm
        (astrocytoma; preparation (f imidazo[1,2-a]pyrazines as inase inhibitors
        for treatment of cancer and other conditions)
IT
     seuroglia, neoplasm
        (glioblastoma; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors
        for treatment of cancer and other conditions)
IT
     ngiogenesis
     ngiogenesis inhibitors
     nti-inflammatory agents
     ntiarthritics
     intidiabetic agents
     antirheumatic agents
     intitumor agents
     Autoimmune disease
     ⊰ladder, neoplasm
     'ardiovascular system, diseas€
     piabetes mellitus
     √ibrosis
     astrointestinal agents
     Head and Neck, neoplasm
     lead and Neck, neoplasm
     `{uman
     mmune disease
     mmunomodulators
     nflammation
     ...ung, neoplasm
     Hammary gland, neoplasm
    Helanoma
      Neuroglia, neoplasm
    Osteoarthritis
    Ovary, neoplasm
     Prostate gland, neoplasm
     .'soriasis
     Pheumatoid arthritis
        (preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment
       of cancer and other conditions)
TΤ
     1:74-79-3P, Imidazo[1,2-a]pyrazine
                                         24241-18-7P,
     3,5-Dibromopyrazin-2-yl)amin∈ 63744-21-8P, 3,5-
     ibromoimidazo[1,2-a]pyrazine 63744-22-9P, 6,8-
     ⇒ibromoimidazo[1,2-a]pyrazine
                                     117718-82-8P, N-(3-Bromoimicazo[1,2-
                                 117718-83-9P, N-(3-Bromoimidaze[1,2-a]pyrazin-
     ..]pyrazin-8-yl)methylamine
                      117718-85-1F, N-(6-Bromoimidazo[1,2-a]pyrazin-8-
     3-yl)ethylamine
                      117718-89-5P, N-(Imidazo[1,2-a]pyrazin-8-y])methylamine
     ··l)methylamine
      17718-92-0P, (3-Bromoimidazo[1,2-a]pyrazin-8-yl)amine
                                                               21(907-84-9P
     #90636-28-3P, 4-[2-[4-(4,4,5,5-Tetramethyl-[1,3,2]dioxaborolan-2-
     1) phenoxy] ethyl] morpholine
                                   756520-70-4P, 4-[2-[3-(4,4,5,5-Tetramethyl-
     1,3,2]dioxaborolan-2-yl)phenoxy]ethyl]morpholine
                                                          787590-40-3P,
                                                        787590-41·4P,
    II- (3-Bromoimidazo[1,2-a]pyrazin-8-yl)butylamine
    II- (3-Bromoimidazo[1,2-a]pyrazin-8-yl)isopropylamine
                                                            78759(-42-5P,
    II-(3-Bromoimidazo[1,2-a]pyrazin-8-yl)(cyclopropyl)amine
                                                                787590-43-6P,
    Benzyl (3-bromoimidazo [1, 2-a] pyrazin-8-yl) amine
                                                       787590-44-<sup>-</sup>P,
     3-Bromoimidazo[1,2-a]pyrazin-8-yl)[2-(morpholin-4-yl)ethyl]amine
    "87590-45-8P, 2-[(3-Bromoimidazo[1,2-a]pyrazin-8-yl)amino]ethanol
     "87590-56-1P, (3-Bromoimidazo[1,2-a]pyrazin-5-yl)dimethylamine
    "87591-39-3P
                    787591-43-9P
                                   787591-44-0P
                                                   787591-77-9P,
    !- (3,5-Dibromoimidazo[1,2-a]pyrazin-8-yl)methylamine
                                                             787591-78-0P,
    II- (5-Bromoimidazo[1,2-a]pyrazin-8-yl) methylamine
    PL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     Reactant or reagent)
        (intermediate; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors
```

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for treatment of cancer and other conditions)
    787590-47-0P, (3-Phenylimidazo[1,2-a]py azin-8-yl)amine
                                                               787590-48- P.
IT
     [3-(4-Amirophenyl)imidazo[1,2-a]pyrazin 8-yl]amine
                                                         787590-51-6P,
     (3-Bromoimidazo[1,2-a]pyrazin-8-yl)(4-methoxyphenyl)amine
     787590-55-0P, (3-Bromoimidazo[1,2-a]pyrazin-8-yl)dimethylamine
     RL: PAC (Fharmacological activity); RCT (Reactant); SPN (Synthetic
    preparaticn); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagen); USES (Uses)
        (kinas€ inhibitor; preparation of im dazo[1,2-a]pyrazines as kina€e
        inhibitors for treatment of cancer and other conditions)
     673857-28-8P, (6-Phenylimidazo[1,2-a]py:azin-8-yl)amine
                                                               787590-46-5P,
IT
                                                       787590-49-2P,
     Methyl(3-phenylimidazo[1,2-a]pyrazin-8-yl)amine
     N-[4-[8-[4-Trifluoromethylbenzoyl)amino]imidazo[1,2-a]pyrazin-3-
     yl]phenyl]-4-trifluoromethylbenzamide 787590-50-5P, N-[4-(8-
     Aminoimidazo[1,2-a]pyrazin-3-yl)phenyl] 4-trifluoromethylbenzamide
     787590-52-7P, (4-Methoxyphenyl)(3-phenylimidazo[1,2-a]pyrazin-8-yl)arine
     787590-53-8P, 4-(8-Methylaminoimidazo[1.2-a]pyrazin-3-yl)phenol
     787590-54-9P, Dimethyl(3-phenylimidazo[1,2-a]pyrazin-8-yl)amine
     787590-57-2P, Isopropyl (3-phenylimidazo[1,2-a]pyrazin-8-yl) amine
     787590-59-4P, 4-(8-Isopropylaminoimidazo[1,2-a]pyrazin-3-yl)phenol
     787590-61-8P, Butyl(3-phenylimidazo[1,2 a]pyrazin-8-yl)amine
     787590-63-0P, Ethyl(3-phenylimidazo[1,2 a]pyrazin-8-yl)amine
     787590-65-2P, [2-(Morpholin-4-yl)ethyl] 3-phenylimidazo[1,2-a]pyrazir-8-
                787590-67-4P, Benzyl (3-pheny imidazo[1,2-a]pyrazin-8-yl) ar ine
     yl)amine
     787590-69-6P, 2-[(3-Phenylimidazo[1,2-a]pyrazin-8-yl)amino]ethanol
     787590-70-9P, 1-Butyl-3-(3-phenylimidazo[1,2-a]pyrazin-8-yl)urea
     787590-71-0P, N-[3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
     yl)phenyl]acetamide
                           787590-72-1P, N-[4-[8-(Cyclopropylamino)imidazc[1,2-
     a]pyrazin-3-yl]phenyl]acetamide
                                       787590-73-2P, 2,6-Dimethyl-4-(8-
     methylaminoimidazo[1,2-a]pyrazin-3-yl)phenol
                                                    787590-74-3P,
     [3-(4-Flucrophenyl)imidazo[1,2-a]pyrazin-8-yl]amine
                                                           787590-75-4P,
     Cyclopropyl(3-phenylimidazo[1,2-a]pyraz:n-8-yl)amine
                                                            787590-76-5P,
     N-[3-(4-F]uorophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
     787590-77-6P, Methyl[3-(2-trifluoromethylphenyl)imidazo[1,2-a]pyrazir-8-
     yl]amine
                787590-78-7P, Methyl[3-(3-tr:fluoromethylphenyl)imidazo[1,2-
                            787590-79-8P, Met hyl [3-(2-phenoxyphenyl) imidazo[1,2-
     a]pyrazin-8-yl]amine
                            787590-80-1P, N-.3-(Biphenyl-2-yl)imidazo[1,2-
     a]pyrazin-8-yl]amine
     a]pyrazin-8-yl]methylamine
                                  787590-81-LP, N-[3-(2-
                                                              787590-82-31,
     Benzyloxyphenyl)imidazo[1,2-a]pyrazin-8 yl]methylamine
     1-[4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]ethanone
     787590-83-4P, 1-[3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
     yl)phenyl]ethanone
                          787590-84-5P, N-[3 (3-Isopropylphenyl)imidazo[1,2-
     a]pyrazin-8-yl]methylamine
                                  787590-85-6P, N-[3-(4-tert-
     Butylphenyl) imidazo [1, 2-a] pyrazin-8-yl] methylamine
                                                          787590-86-7P,
     N-[3-(4-Cyclohexylphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
     787590-87-8P, N-[3-[3,5-Bis(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-8-
                      787590-89-0P, 3-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
     yl]methylamine
                      787590-91-4P, 4-(8-Methylaminoimidazo[1,2-a]pyrazir-3-
     yl)benzoic acid
     yl)benzoic acid
                       787590-92-5P
                                      787590·93-6P, [4-(8-
     Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]carbamic acid benzyl ester
     787590-94-7P, Methyl[3-(4-trifluoromethylphenyl)imidazo[1,2-a]pyrazin-8-
                787590-95-8P, N-[3-(2,4-Difluorophenyl)imidazo[1,2-a]pyrazin-8-
                      787590-96-9P, N-[3-(3,4-Dichlorophenyl)imidazo[1,2-
     yl]methylamine
     a]pyrazin-8-yl]methylamine
                                  787590-98-1P, N-[3-(3-Fluoro-4-
     methoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                            787590-99-2P,
     N-[3-(Biphenyl-4-yl)imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                                  787591-C0-8P,
     N-[3-(Biphenyl-3-yl)imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                                  787591-01-9P,
     N-[3-(4-Benzyloxyphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
     787591-02-0P, Methyl[3-(naphthalen-1-yl)imidazo[1,2-a]pyrazin-8-yl]amine
     787591-03-1P, N-[3-(2-Chlorophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
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78 591-04-2P, N-[3-[8-(Cyclopror/lamino)imidazo[1,2-a]pyrazin 3-
                      787591-05-3P, Methyl[3-(2-
vl phenyl]acetamide
tr fluoromethoxyphenyl)imidazo[].2-a]pyrazin-8-yl]amine
                                                           787: 91-06-4P,
Me hyl[3-(3-trifluoromethoxypher/l)imidazo[1,2-a]pyrazin-8-yl]amine
78 591-07-5P, Cyclopropyl[3-[3-[2-(morpholin-4-
yl ethoxy]phenyl]imidazo[1,2-a]r/razin-8-yl]amine
                                                     787591-08 6P,
                                                            78~591-09-7P,
3- 8-(Cyclopropylamino)imidazo[].2-a]pyrazin-3-yl]phenol
Me hyl[3-(4-trifluoromethoxypher/l)imidazo[1,2-a]pyrazin-8-yl]amine
78"591-10-0P, N-[3-(2-Fluoropher/l)imidazo[1,2-a]pyrazin-8-yl]methylamine
78 591-11-1P, N-[3-(3,4-Difluorcohenyl)imidazo[1,2-a]pyrazin-{-
yl methylamine
                 787591-12-2P, N-[3-(Benzodioxol-5-yl)imidazo 1,2-
                              787591-13-3P, N-[3-(3-
a]; yrazin-8-yl]methylamine
Ch orophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
                                                       787591-14-4P,
N- 3-(4-Methoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
78 591-15-5P, N-[3-(2-Methoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
78 591-16-6P, Methyl[3-(4-phenox/phenyl)imidazo[1,2-a]pyrazin-8-yl]amine
78 591-17-7P, N-[3-(4-Benzyloxy-3-fluorophenyl)imidazo[1,2-a]ryrazin-8-
                 787591-18-8P, N-[3-(4-Isopropylphenyl)imidazc[1,2-
yl methylamine
                            787591-19-9P, N-[3-[3,5-
a];yrazin-8-yl]methylamine
Bis (trifluoromethyl) phenyl] imidazo[1,2-a] pyrazin-8-yl] (cyclop: opyl) amine
78 591-20-2P, Cyclopropyl[3-(3,4-dichlorophenyl)imidazo[1,2-a]pyrazin-8-
           787591-21-3P, 3-[8-(C/clopropylamino)imidazo[1,2-a]pyrazin-3-
yllamine
                  787591-22-4P, Methyl[3-[4-[2-(morpholin-4-
yl benzoic acid
yl ethoxy]phenyl]imidazo[1,2-a]p/razin-8-yl]amine
                                                     787591-23-5P,
Cyclopropyl[3-[4-[2-(morpholin-4-yl)ethoxy]phenyl]imidazo[1,2-a]pyrazin-8--
           787591-24-6P, Cyclopropyl[3-(4-dimethylaminophenyl)imidazo[1,2-
yl amine
                       787591-25-7P, Cyclopropyl[3-(4-
a]pyrazin-8-yl]amine
phenoxyphenyl)imidazo[1,2-a]pyrazin-8-yl]amine
                                                  787591-26-8P,
1- 4-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-yl]phenyl]ethanone
78"591-27-9P, [4-[8-(Cyclopropylamino)imidazo[1,2-a]pyrazin-3-
yl]phenyl]carbamic acid benzyl ester
                                        787591-28-0P, N-[4-(8-
Methylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]acetamide
                                                           787591-29-1P,
N- 3-(3-Aminophenyl)imidazo[1,2-1]pyrazin-8-yl](cyclopropyl)anine
78 591-30-4P, N-[3-(4-Aminophenyl)imidazo[1,2-a]pyrazin-8-yl]methylamine
78 591-31-5P, Methyl[3-(naphthalen-2-yl)imidazo[1,2-a]pyrazin-8-yl]amine
78 591-32-6P, 4-[8-(Cyclopropylanino)imidazo[1,2-a]pyrazin-3-yl]benzoic
       787591-33-7P, N-[3-(4-Aminophenyl)imidazo[1,2-a]pyrazir-8-
yl] (cyclopropyl) amine
                        787591-31-8P, Methyl[3-[3-[2-(morpholin-4-
yl ethoxy]phenyl]imidazo[1,2-a]p/razin-8-yl]amine
                                                     787591-36-0P,
N- 3-(3-Aminophenyl)imidazo[1,2-1]pyrazin-8-yl]methylamine
                                                               787591-37-1P,
3- 8-Methylaminoimidazo[1,2-a]pycazin-3-yl)phenol
                                                     787591-38-2P,
4- 8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)-N-[2-(morpholin-4-
                     787591-40-62, 4-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl, ethyl]benzamide
yl!-N-[3-(morpholin-4-yl)propyl]penzamide
                                             787591-41-7P,
4- 8-Methylaminoimidazo[1,2-a]pyrazin-3-yl)-N-[3-(pyrrolidin-1-
                      787591-42-3P, 1-[3-(8-Methylaminoimidazc[1,2-
yl)propyl]benzamide
a]pyrazin-3-yl)phenyl]-3-[3-(morpholin-4-yl)propyl]urea
                                                            787591-45-1P
               787591-47-3P
78~591-46-2P
                               787591-48-4P, 1-[4-(8-Methylamiroimidazo[1,2-
a]pyrazin-3-yl)phenyl]-3-[3-(morpholin-4-yl)propyl]urea
                                                            787591-49-5P
78<sup>-</sup>591-50-8P
               787591-51-9P, 1-[1-(8-Methylaminoimidazo[1,2-a]pyrazin-3-
yl)phenyl]-3-[3-(pyrrolidin-1-yl)propyl]urea
                                                787591-52-0P,
4- Pyrrolidin-1-yl)piperidine-1-carboxylic acid N-[4-(8-
met hylaminoimidazo[1,2-a]pyrazin-3-yl)phenyl]amide
                                                      787591-54-2P,
1-[4-(8-Methylaminoimidazo[1,2-a|pyrazin-3-yl)phenyl]-3-[2-(mcrpholin-4-
yl)ethyl]urea 787591-56-4P, 4-Hydroxypiperidine-1-carboxylic acid N-[4-(8-methylaminoimidazo[1,2-a|pyrazin-3-yl)phenyl]amide 787591-
                                                               787591-57-5P,
4-Hydroxypiperidine-1-carboxylic acid N-[3-(8-methylaminoimidazo[1,2-
a]pyrazin-3-yl)phenyl]amide 78/591-58-6P, 1-[3-(8-Methylaminoimidazo[1,2-
a]pyrazin-3-yl)phenyl]-3-[2-(morpholin-4-yl)ethyl]urea
                                                         787591-59-7P,
1-[3-(8-Methylaminoimidazo[1,2-a|pyrazin-3-yl)phenyl]-3-[2-(pyrrolidin-1-
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yl)ethyl]urea 787591-61-1P, 1-[3-(8-Met ylaminoimidazo[1,2-a]pyrazin 3-
     yl)phenyl]-[-[3-(pyrrolidin-1-yl)propyl]u ea 787591-63-3P
                                                                   787591-6' -5P
     787591-66-61, 1-[4-(8-Methylaminoimidazo[,2-a]pyrazin-3-yl)phenyl]-3- 2-
                                  787591-68-8 787591-70-2P,
     (pyrrolidin 1-yl)ethyl]urea
     1-[4-[8-(Cyclopropylamino)imidazo[1,2-a]p razin-3-yl]phenyl]-3-[3-
     (pyrrolidin 1-yl)propyl]urea
                                  787591-72- P, 1-[4-[8-
     (Cyclopropy amino) imidazo[1,2-a]pyrazin-3 yl]phenyl]-3-[3-(morpholin-4
                     787591-74-6P, 1-[4-[8-(C clopropylamino)imidazo[1,2-
     yl)propyl]urea
     a]pyrazin-3 yl]phenyl]-3-[2-(pyrrolidin-1 yl)ethyl]urea
                                                              787591-75-7P,
     1-[4-[8-(Cyclopropylamino)imidazo[1,2-a]prazin-3-yl]phenyl]-3-[2-
     (morpholin-4-yl)ethyl]urea
                                 787591-76-8P N-[5-(4-
     Fluorophenyl)imidazo[1,2-a]pyrazin-8-yl]mothylamine
                                                           787591-79-1P,
     Methyl(5-ph∈nylimidazo[1,2-a]pyrazin-8-yl amine
                                                     787591-81-5P,
                                                                787591-82-61,
     Methyl [5-(thiophen-3-yl)imidazo[1,2-a]pyrazin-8-yl]amine
     4-(8-Methylaminoimidazo[1,2-a]pyrazin-5-y )phenol
                                                        787591-83-7P,
     N-[4-(8-Met] ylaminoimidazo[1,2-a]pyrazin- -yl)phenyl]acetamide
     787591-84-81, N-[3,5-Bis (4-fluorophenyl) inidazo [1,2-a] pyrazin-8-
     yl]methylamine 787591-85-9P, N-(3,5-Dipmenylimidazo[1,2-a]pyrazin-8-
                     787591-86-0P, Methyl(6-p:enylimidazo[1,2-a]pyrazin-8-
     yl) methylamine
               787591-87-1P, 4-(8-Methylamino midazo[1,2-a]pyrazin-6-yl)phenol
     yl)amine
     787591-88-2F, Dimethyl(3-phenylimidazo[1,.-a]pyrazin-5-yl)amine
     RL: PAC (Pharmacological activity); SPN (.ynthetic preparation); THU
     (Therapeutic use); BIOL (Biological study; PREP (Preparation); USES
     (Uses)
        (kinase inhibitor; preparation of imid zo[1,2-a]pyrazines as kinase
        inhibitors for treatment of cancer and other conditions)
     274-79-3P, Imidazo[1,2-a]pyrazine 63744-2-8P,
TT
     3,5-Dibromoimidazo[1,2-a]pyrazine 63744-22-9P,
     6,8-Dibromoimidazo[1,2-a]pyrazine 787590-56-1P,
     (3-Bromoimicazo[1,2-a]pyrazin-5-yl)dimeth··lamine
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of imidazo[ ,2-a]pyrazines as kinase inhibitors
        for treatment of cancer and other cond tions)
     274-79-3 CFPLUS
RN
     Imidazo[1,2-a]pyrazine (8CI, 9CI) (CA INDEX NAME)
CN
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RN 63744-21-8 CAPLUS CN Imidazo[1,2-a]pyrazine, 3,5-dibromo- (9CI (CA INDEX NAME)

RN 63744-22-9 CAPLUS CN Imidazo[1,2-a]pyrazine, 6,8-dibromo- (9CI (CA INDEX NAME)

RN 7875 0-56-1 CAPLUS

CN Imid zo[1,2-a]pyrazin-5-amine, 3-b:como-N,N-dimethyl- (9CI) (CA INDEX NAME

7875:0-55-0P, (3-Bromoimidazo[1,2-1]pyrazin-8-yl)dimethylamine RL: :AC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PFEP

(Preparation); RACT (Reactant or reagent); USES (Uses)

(; inase inhibitor; preparation of imidazo[1,2-a]pyrazines as kinase

it hibitors for treatment of canter and other conditions)

RN 787510-55-0 CAPLUS

CN Imid zo[1,2-a]pyrazin-8-amine, 3-b:como-N,N-dimethyl- (9CI) (CA INDEX NAME

787590-54-9P, Dimethyl(3-phenylimilazo[1,2-a]pyrazin-8-yl)amine 787591-88-2P, Dimethyl(3-phenylimilazo[1,2-a]pyrazin-5-yl)amine RL: PAC (Pharmacological activity): SPN (Synthetic preparation); THU

(The apeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

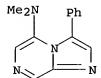
() inase inhibitor; preparation of imidazo[1,2-a]pyrazines as kinase inhibitors for treatment of cancer and other conditions)

RN 787550-54-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-8-amine, N,N-dimethyl-3-phenyl- (9CI) (CA INDEX NAME:

RN787591-88-2 CAPLUS

Imidazo[1,2-a]pyrazin-5-amine, N,N-dimethyl 3-phenyl- (9CI) (CA INDEX CN NAME)



L57 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2006 ACS 'n STN

ACCESSION NUMBER: 2004:696381 CAPLUS

DOCUMENT NUMBER: 141:225537

TITLE: Certain 8-heteroaryl-6-j-henyl-imidazo[1,2-a]pyrazines

as modulators of Hsp90 omplex activity and their preparation, pharmaceut cal compositions, and methods

of use

Currie, Kevin S.; Desimone, Robert W.; Pippin, Douglas INVENTOR(S):

A.; Darrow, James W.; M tchell, Scott A.

PATENT ASSIGNEE(S): Cellular Genomics, Inc. USA

PCT Int. Appl., 106 pp. SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. CCJNT: 2

PATENT INFORMATION:

|           | NT NC   |       |      |     | KINI | )   | DATE |       |     |      |      |       | -   |     | D   | ATE  |     |
|-----------|---------|-------|------|-----|------|-----|------|-------|-----|------|------|-------|-----|-----|-----|------|-----|
|           |         |       |      |     |      | -   |      |       |     |      |      |       |     |     | -   |      |     |
| WO 2      | 00407   | 72080 | 0    |     | A1   |     | 2004 | 0826  | 1   | WO 2 | 04-1 | JS392 | 22  |     | 2   | 0040 | 210 |
|           | W: A    | Æ, Æ  | ΑE,  | AG, | AL,  | AL, | AM,  | AM,   | AM, | AT,  | AT,  | AU,   | AZ, | AZ, | BA, | BB,  | BG, |
|           |         |       |      |     |      |     | BY,  |       |     |      |      |       |     |     |     |      |     |
|           |         | -     |      | -   |      |     | DE,  |       | -   | •    | •    | •     | •   | •   | •   | •    | •   |
|           |         |       |      |     |      |     | GE,  |       |     | -    | -    | -     |     |     |     |      | -   |
|           |         |       |      |     |      |     |      |       |     |      |      |       |     |     |     |      |     |
|           |         |       |      |     |      |     | KG,  |       |     |      |      |       |     |     |     |      |     |
|           | I       | ıΚ, ] | LR,  | LS, | LS,  | LT, | LU,  | LV,   | MA, | MD,  | MD,  | MG,   | MK, | MN, | MW, | MX,  | MX, |
|           | M       | 1Z, 1 | MZ,  | NA, | NI   |     |      |       |     |      |      |       |     |     |     |      |     |
|           | RW: B   | BW, C | GH,  | GM, | KE,  | LS, | MW,  | MZ,   | SD, | SL,  | SZ,  | TZ,   | ŪĠ, | ZM, | ZW, | ΑT,  | BE, |
|           | В       | 3G, ( | CH,  | CY, | CZ,  | DE, | DK,  | EE,   | ES, | FI,  | FR,  | GB,   | GR, | HU, | IE, | IT,  | LU, |
|           |         |       |      |     |      |     | SI,  |       |     |      |      |       |     |     |     |      |     |
|           |         |       |      |     |      |     | SN,  |       |     |      |      |       |     |     |     |      |     |
|           | G       | SQ, C | GW,  | ML, | MR,  | NE, | SN,  | TD,   | TG  | -    | -    | •     | -   | •   | Ţ   | •    | •   |
| US 2      | 00505   | 4648  | 8    |     | A1   |     | 2005 | 0310  | 1   | US 2 | 04-  | 77600 | 02  |     | 2   | 0040 | 210 |
| US 2      | 00505   | 4649  | 9    |     | A1   |     | 2005 | 0310  | 1   | US 2 | 04-  | 7766  | 31  |     | 2   | 0040 | 210 |
| PRIORITY  | APPLN   | J. II | NF). | :   |      |     |      |       | 1   | US 2 | 03-4 | 1463  | 79P | ]   | P 2 | 0030 | 210 |
| OTHER SOU | IRCE (S | 3):   |      |     | MARI | TAS | 141: | 22553 | 37  |      |      |       |     |     |     |      |     |

$$\mathbb{R}^{2} - \mathbb{Z} \xrightarrow{\mathbb{N}} \mathbb{R}^{3}$$

The invention pertains to compds. I and all pharmaceutically acceptable ΔR forms thereof [wherein: R1 = H, halo. alkyl, alkoxy, (hetere)cycloalkyl(alkyl), sulfonamile, alkoxyalkyl, alkoxyalkoxy. (di)allylamino(alkyl); or R1 = Ph or a benzo-fused 5- to 7-member d N/O/S heterocycloalkyl bearing 0-3 selected substituents; W = Ph or 5-cr 6-membered N/O/S heteroaryl with 1-4 heteroatoms and 0-3 selected substituents; X = N or CH; R2 = (alk xy) alkyl, (hetero) cycloalkyl alkyl), (alkoxy) alkoxy; or R2 = phenyl(alkyl or heteroaryl(alkyl) bearing 0-3 selected substituents; Z = (CR8R9)n, CONR10, NR10CO, or NR10CONR11; R8, R9 = H, alkyl, alkoxy, halo; n = 0-2; R10, R11 = H, alkyl, or Ph or heteroaryl with 0-3 selected substituents; R3 = H, alkyl; or R3 = (hetera) cycloalkyl(alkyl), Ph, or heteroaryl each bearing 0-3 selected substituents; or R3 = phenoxyphenyl with each ring bearing 0-3 selected substituents]. Addnl. compds. with a linking group between R1 and W are disclosed but neither prepared nor claimed. The compds. I are moculators of kinase activity and Hsp90 complex activity. Certain compds. I are highly active inhibitors of Hsp90 complex activity. The invention also provides pharmaceutical compns. containing one or more compound I, or a pharmaceutically acceptable form of such compds., and one or more pharmaceutically acceptable carriers, excipients, or diluents. The invention further comprises methods of treating patients suffering from certain diseases and disorders responsive to Hsp90 complex modulation, which comprise administering to such patients an amount of a compound I effective to reduce signs or symptoms of the disease or disorder. These diseases include cancer, including chronic myeloid leukemia, melanoma, breast, ovarian, brain, thyroid, colorectal, prostate, and bladder cancer, heart disease, stroke, autoimmune/inflammatory diseases, and neurodegenerative diseases. The methods of treatment include administering a sufficient amount of a compound I or a form thereof to decrease the symptoms or slow the

progression of these diseases or disorders. he invention also encompasses methods of treating non-human pat ents, including livestock and domesticated companion animals, suffering from a disease or disorder responsive to Hso90 complex modulation. Meth ds of treatment include administering a compound I as a single active agent or administering a compound I in combination with one or more ot er therapeutic agents. The invention also includes a method for determin ng the presence of certain kinases or Hsp90 complex in a sample, comprising cont cting the sample with a compound I, or form thereof, and detecting Hs. 90 complex activity in the sample. Almost 50 compds. I were prepared in examples. For instance, compound II was prepared in 4 steps: (1) depretection of BrCH2CH(OEt)2 with HBr and cycloconlensation with 3,5-dibromo-2-, minopyrazine to give 6,8-dibromoimidazo[1,2-a]pyrazine; (2) aminol sis of the 8-bromo with 4-(p-tolyl)-1H-imidazole; (3) Suzuki coupling of the 6-bromo with 3-H2NC6H4B(OH)2.4Cl; and (4) carbamoylation o the amino group with 1-isocyanato-2-methylbenzene. In a tumor cel monolayer proliferation assay using MCF-7 or HCT-15 cells, compds. I ad IC50 values of 25 μM or less, with certain compds. having values of 10 µM or less. ICM C07D487-04 ICS A61K031-4985; A61P035-02; A61P037-00; C0 D241-00; C07D235-00 28-17 (Heterocyclic Compounds (More Than One !etero Atom)) Section cross-reference(s): 1, 63 heteroarylphenylimidazopyrazine prepn modulator Hsp90 complex antitumor immunosuppressant neuroprotectant antiinflammatory; imidazopyrazine pyridinyl imidazolyl urea treatment cancer autoimmune neurodegenerative disease Cytoprotective agents (neuroprotective; preparation of heteroary phenylimidazopyrazines as modulators of Hsp90 complex activity) 746653-81-6P, 1-[3-[8-(4-Phenylimidazol-1-yl) midazo[1,2-a]pyrazin-6-yl]phenyl]-3-o-tolylurea 746653-82-7P, 1-(4 Chlorophenyl)-3-[3-[8-(4-phenylimidazol-1-yl)imidazo[1,2-a]pyraz\_n-6-yl]phenyl]urea 746653-83-8P, 1-(2-Methylsulfanylphenyl)-3-[3 [8-(2-phenylimidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]urea 746653-84-9P, 1-[3-[8-(2-Phenylimidazol-1-yl)imidazo[1,2-a]; yrazin-6-yl]phenyl]-3-otolylurea 746653-85-0P, 1-(4-Chlorophenyl)-3-3-[8-[4-(4chlorophenyl) imi dazol-1-yl] imidazo[1,2-a]pyra: in-6-yl]phenyl]urea 746653-86-1P, 1-[3-[8-[4-(4-Chlorophenyl)imid; zol-1-yl]imidazo[1,2a]pyrazin-6-yl]phenyl]-3-o-tolylurea 746653-87-2P, 1-(4-Chlorophenyl)-3-[3-[8-(4-p-tolylimidazol 1-yl)imidazo[1,2-a]pyrazin-6yl]phenyl]urea 746653-88-3P, 1-o-Tolyl-3-[3-[8-(4-ptolylimidazo[-1-/l)imidazo[1,2-a]pyrazin-6-yl,phenyl]urea 746653-89-4P, 1-(4-Chlorophenyl)-3-[3-[8-(4-methylimidazol-1yl)imidazo[1,2-a|pyrazin-6-yl]phenyl]urea 746653-90-7P, 1-(3-Chloro-4-fluorophenyl)-3-[3-[8-[4-(4-chlcrophenyl)imidazol-1yl]imidazo[1,2-a|pyrazin-6-yl]phenyl]urea 746653-91-8P, 1-(3-Chloro-4-fluorophenyl)-3-[3-[8-(4-phenyl:midazol-1-yl)imidazo[1,2a]pyrazin-6-yl]pnenyl]urea 746653-92-9P, 1-[3 [8-[4-(4-Chlorophenyl) imi dazol-1-yl] imidazo[1,2-a]pyra; in-6-yl]phenyl]-3-[4-[(4methylpiperazin-1-yl)methyl]phenyl]urea 746653-93-0P, 1-[3-[8-[4-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6yl]phenyl]-3-[4-[(morpholin-4-yl)methyl]phenyl]urea 746653-94-1P , 1-[3-[8-[4-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6yl]phenyl]-3-[4-[[(3-ethoxypropyl)amino]methyl]phenyl]urea

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1-(3-Chloro-4-fl lorophenyl)-3-[3-[8-(3-phenyl; yrazol-1-yl) imidazo[1,2-

fluorophenyl)-3-[3-[8-(2-phenylimidazol-1-yl):midazo[1,2-a]pyrazin-6-

746653-95-2P, 1-(4-Chlorophenyl)-3-[3-[8-(3-p]enylpyrazol-1yl)imidazo[1,2-a|pyrazin-6-yl]phenyl]urea 746653-96-3P,

a]pyrazin-6-yl]phenyl]urea 746653-97-4P, 1-(3 Chloro-4-

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yl]phenyllurea 746653-98-5p, 4-Chloro-: [3-[8-(2-phenylimidazol-
1-yl)imicazo[1,2-a]pyrazin-6-yl]phenyl benzamide 746653-99-6P,
3-[(Morp) olin-4-yl) methyl] -N-[3-[8-(2-phenylimidazol-1-yl) imidazo[1.2-
a]pyrazi: -6-yl]phenyl]benzamide 746654-00-2P,
4-[(Morp) olin-4-yl) methyl] -N-[3-[8-(2-:)henylimidazol-1-yl) imidazo[1,2-
a]pyrazir-6-yl]phenyl]benzamide 746654 01-3P,
1-(3-Chlcro-4-fluorophenyl)-3-[3-[8-(2 p-tolylimidazol-1-yl)imidazol1,2-
a]pyrazii -6-yl]phenyl]urea 746654-02-4P, 1-[3-[8-(2-p-
Tolylimicazol-1-yl)imidazo[1,2-a]pyraz n-6-yl]phenyl]-3-(3-
trifluor(methylphenyl)urea 746654-03-5P, 1-[4-[(Morpholin-4-
y1) methyl | phenyl | -3 - [3 - [8 - (2 - phenylimidazol - 1 - y1) imidazo [1, 2 - a] pyraz in -6 -
yl]pheny]]urea 746654-04-6P, 6-[4-[(Morpholin-4-
y1) methy1 | pheny1] -8-(2-phenylimidazol- -y1) imidazo[1,2-a] pyrazine
746654-05-7P, 1-(4-Chlorophenyl)-3-[3-[8-(2-o-tolylimidazol-1-
yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]urea 746654-06-8P,
1-(3-Chlcro-4-fluorophenyl)-3-[3-[8-(2 o-tolylimidazol-1-yl)imidazol1,2-
a]pyrazir-6-yl]phenyl]urea 746654-07-9P, 1-(4-Chlorophenyl)-3-{3-
[8-[2-(2-methoxyphenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6-
yl]phenyl]urea 746654-08-0P, 1-(4-Chlorophenyl)-3-[3-[8-[2-(2-
fluorophenyl)imidazol-1-yl]imidazo[1,2 a]pyrazin-6-yl]phenyl]urea
746654-09-1P, 1-(3-Chloro-4-fluorophenyl)-3-[3-[8-[2-(2-
fluorophenyl)imidazol-1-yl]imidazo[1,2 a]pyrazin-6-yl]phenyl]urea
746654-10-4P, 1-[3-[8-[2-(2-Fluorophenyl)imidazol-1-yl]imidazo[1,2-
a]pyrazir-6-yl]phenyl]-3-(3-trifluoromethylphenyl)urea
746654-11-5P, 1-[3-[8-[2-(2-Methoxyphenyl)imidazol-1-
yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-3-(3-trifluoromethylphenyl)urea
746654-12-6P, 1-(4-Chlorophenyl)-3-[3-8-(2-isopropylimidazol-1-
yl)imida: o[1,2-a]pyrazin-6-yl]phenyl]urea 746654-13-7P,
1-(3-Chlcro-4-fluorophenyl)-3-[3-[8-(2 isopropylimidazol-1-yl)imidazo[1,2-
a]pyrazir-6-yl]phenyl]urea 746654-14-8P, 1-[3-[8-(4-
Bromoimicazol-1-yl)imidazo[1,2-a]pyraz:n-6-yl]phenyl]-3-(4-
chlorophenyl) urea 746654-15-9P, 4-Fluoro-N-[3-[8-(2-
phenylimidazol-1-yl)imidazo[1,2-a]pyra::in-6-yl]phenyl]benzamide
746654-16-0P, 3-Methoxy-N-[3-[8-(2-phenylimidazol-1-yl)imidazo[1,2-
a]pyrazir -6-yl]phenyl]benzamide 746654-17-1P,
3-Methoxy-4-methyl-N-[3-[8-(2-phenylim_dazol-1-yl)imidazo[1,2-a]pyrazin-6-
yl]pheny]benzamide 746654-18-2P, N-[3 [8-(2-Phenylimidazol-1-
yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]benzamide 746654-19-3P,
2,6-Dimet hyl-N-[3-[8-(2-phenylimidazol 1-yl)imidazo[1,2-a]pyrazin-6-
yl]phenyl]benzamide 746654-20-6P, 4-Fluoro-N-[3-[8-(2-p-
tolylimicazol-1-yl)imidazo[1,2-a]pyraz_n-6-yl]phenyl]benzamide
746654-21-7P, 3-Methoxy-N-[3-[8-(2-p-tolylimidazol-1-
yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]benzamide 746654-22-8P,
3-Methoxy-4-methyl-N-[3-[8-(2-p-tolylimidazol-1-yl)imidazo[1,2-a]pyrazin-6-
yl]phenyl}benzamide 746654-23-9P, 2-(4 Chlorophenyl)-N-[3-[8-(2-
phenylimidazol-1-yl)imidazo[1,2-a]pyramin-6-yl]phenyl]acetamide
746654-24-0P, 2-(4-Chlorophenyl)-N-[3-8-[2-(4-
chlorophenyl)imidazol-1-yl]imidazo[1,2 a]pyrazin-6-yl]phenyl]acetamide
746654-25-1P, N-[3-[8-[2-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-
a]pyrazin-6-yl]phenyl]-2-(3-trifluoromethylphenyl)acetamide
746654-26-2P, 1-[3-[8-[2-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-
a]pyrazir.-6-yl]phenyl]-3-[4-[(morpholin-4-yl)methyl]phenyl]urea
746654-27-3P, 1-(4-Chlorobenzyl)-3-[3-[8-[2-(4-
chlorophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]urea
746654-28-4P, 1-[3-[8-[2-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-
a]pyrazin-6-yl]phenyl]-3-[4-(4-methylp:perazin-1-ylmethyl)phenyl]urea
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (drug candidate; preparation of heteroarylphenylimidazopyrazines as
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modulators of Esp90 complex activity)
    63744-22-9P, 6,8-Dibromoimidazo[1,2-a]pyrazine 3744-23-0P
TΤ
     , 6,8-Dibromoimida o [1,2-a] pyrazine hydrobromid 746654-29-5P,
    6-Bromo-8-(4-p-tol/limidazol-1-yl)imidazo[1,2-a pyrazine
    746654-30-8P, 3-[8 (4-p-Tolylimidazol-1-yl)imid zo[1,2-a]pyrazin-6-
    yl)phenylamine
    RL: RCT (Reactant): SPN (Synthetic preparation) PREP (Preparation); RACT
    (Reactant or reage it)
        (intermediate; preparation of heteroarylphen limidazopyrazines as modulators
       of Hsp90 comple (activity)
IT
    614-68-6, 1-Isocya nato-2-methylbenzene
                                             670-91 7, 4-p-Tolyl-1H-imidazole
                                                  2 241-18-7,
    2032-35-1, Bromoac≥taldehyde diethyl acetal
    3,5-Dibromo-2-amin pyrazine
                                  25026-34-0, (4-Ch orophenyl) acetyl chloride
    85006-23-1, 3-Amin phenylboronic acid hydrochlo ide 746654-31-9,
    3-[8-(2-Phenylimid:zol-1-yl)imidazo[1,2-a]pyraz n-6-yl]phenylamine
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting material; preparation of heteroary phenylimidazopyrazines as
       modulators of H3p90 complex activity)
    746653-81-6P, 1-[3-[8-(4-Phenylimidazol-1-yl)im dazo[1,2-a]pyrazin-
IT
    6-yl]phenyl]-3-o-tolylurea 746653-82-7P, 1-(4-Chlorophenyl)-3-[3-
    [8-(4-phenylimidaz>l-1-yl)imidazo[1,2-a]pyrazin 6-yl]phenyl]urea
    746653-83-8P, 1-(2 Methylsulfanylphenyl)-3-[3-[ -(2-phenylimidazol-
    1-yl)imidazo[1,2-a pyrazin-6-yl]phenyl]urea 746:53-84-9P,
    1-[3-[8-(2-Phenyli midazol-1-yl) imidazo[1,2-a]py azin-6-yl]phenyl]-3-o-
    tolylurea 746653-85-0P, 1-(4-Chlorophenyl)-3-[3 [8-[4-(4-
    chlorophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazi..-6-yl]phenyl]urea
    746653-86-1P, 1-[3:[8-[4-(4-Chlorophenyl)imidazol-1-yl]imidazo[1,2-
    a]pyrazin-6-yl]phe nyl]-3-o-tolylurea 746653-87-2P,
    1-(4-Chlorophenyl) ·3-[3-[8-(4-p-tolylimidazol-1 yl)imidazo[1,2-a]pyrazin-6-
    yl]phenyl]urea 746653-88-3P, 1-o-Tolyl-3-[3-[8- 4-p-
    tolylimidazol-1-yl imidazo[1,2-a]pyrazin-6-yl]phenyl]urea
    746653-89-4P, 1-(4 Chlorophenyl)-3-[3-[8-(4-met!.ylimidazol-1-
    yl)imidazo[1,2-a]p/razin-6-yl]phenyl]urea 74665,-90-7P,
    1-(3-Chloro-4-fluorophenyl)-3-[3-[8-[4-(4-chlorophenyl)imidazol-1-
    yl]imidazo[1,2-a]p/razin-6-yl]phenyl]urea 746653-91-8P,
    1-(3-Chloro-4-fluo:ophenyl)-3-[3-[8-(4-phenylim dazol-1-yl)imidazo[1,2-
    a]pyrazin-6-yl]phe.yl]urea 746653-92-9P, 1-[3-[.-[4-(4-
    Chlorophenyl) imida zol-1-yl] imidazo[1,2-a]pyrazi..-6-yl]phenyl]-3-[4-[(4-
    methylpiperazin-1-/l)methyl]phenyl]urea 746653-93-0P,
    1-[3-[8-[4-(4-Chlocophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6-
    , 1-[3-[8-[4-(4-Ch:orophenyl)imidazol-1-yl]imidazo[1,2-a]pyrazin-6-
    yl]phenyl]-3-[4-[[(3-ethoxypropyl)amino]methyl]phenyl]urea
    746653-95-2P, 1-(4-Chlorophenyl)-3-[3-[8-(3-phe:ylpyrazol-1-
    yl)imidazo[1,2-a]p/razin-6-yl]phenyl]urea 746653-96-3P,
    1-(3-Chloro-4-fluocophenyl)-3-[3-[8-(3-phenylpy:azol-1-yl)imidazo[1,2-
    a]pyrazin-6-yl]phenyl]urea 746653-97-4P, 1-(3-Chloro-4-
    fluorophenyl)-3-[3:[8-(2-phenylimidazol-1-yl)im dazo[1,2-a]pyrazin-6-
    yl]phenyl]urea 746653-98-5P, 4-Chloro-N-[3-[8-(:-phenylimidazol-
    1-yl)imidazo[1,2-a pyrazin-6-yl]phenyl]benzamid ( 746653-99-6P,
    3-[(Morpholin-4-yl methyl]-N-[3-[8-(2-phenylimidazol-1-yl)imidazo[1,2-
    a]pyrazin-6-yl]phenyl]benzamide 746654-00-2P,
    4-[(Morpholin-4-yl methyl]-N-[3-[8-(2-phenylimi@azol-1-yl)imidazo[1,2-
    a]pyrazin-6-yl]phe:yl]benzamide 746654-01-3P,
    1-(3-Chloro-4-fluocophenyl)-3-[3-[8-(2-p-tolylimidazol-1-yl)imidazo[1,2-
    a)pyrazin-6-yl)phe:yl]urea 746654-02-4P, 1-[3-[{-(2-p-
    Tolylimidazol-1-yl imidazo[1,2-a]pyrazin-6-yl]phenyl]-3-(3-
    trifluoromethylphenyl)urea 746654-03-5P, 1-[4-[Morpholin-4-
    yl)methyl]phenyl]-3-[3-[8-(2-phenylimidazol-1-y )imidazo[1,2-a]pyrazin-6-
    yl]phenyl]urea 746654-04-6P, 6-[4-[(Morpholin-4
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y1) methyl], henyl]-8-(2-phenylimidazol-1-1) imidazo[1,2-a] pyrazine
746654-05-7P, 1-(4-Chlorophenyl)-3-[3-[8 (2-o-tolylimidazol-1-
yl)imidazo 1,2-a]pyrazin-6-yl]phenyl]ure + 746654-06-8P,
1-(3-Chlore-4-fluorophenyl)-3-[3-[8-(2-o tolylimidazol-1-yl)imidazo[1,2-
a]pyrazin-(-yl]phenyl]urea 746654-07-9P, 1-(4-Chlorophenyl)-3-[3-
[8-[2-(2-methoxyphenyl)imidazol-1-yl]imilazo[1,2-a]pyrazin-6-
yl]phenyl]irea 746654-08-0P, 1-(4-Chlorophenyl)-3-[3-[8-[2-(2-
fluorophen 1) imidazol-1-yl] imidazo[1,2-a pyrazin-6-yl] phenyl] urea
746654-09-1P, 1-(3-Chloro-4-fluorophenyl -3-[3-[8-[2-(2-
fluorophenyl)imidazol-1-yl]imidazo[1,2-a pyrazin-6-yl]phenyl]urea 746654-10-4P, 1-[3-[8-[2-(2-Fluorophenyl imidazol-1-yl]imidazo[1,2-
a]pyrazin-(-yl]phenyl]-3-(3-trifluoromet ylphenyl)urea 746654-11-5P**
   , 1-[3-[8-[2-(2-Methoxyphenyl)imidazo]-1-yl]imidazo[1,2-a]pyrazin-6-
vl]phenyl]-3-(3-trifluoromethylphenyl)urea
                                             ***746654-12-6P,
1-(4-Chlorcphenyl)-3-[3-[8-(2-isopropylimidazol-1-yl)imidazo[1,2-a]py; azin-
6-yl]phenyl]urea 746654-13-7P, 1-(3-Chlo:o-4-fluorophenyl)-3-[3-
[8-(2-isopropylimidazol-1-yl)imidazo[1,2 a]pyrazin-6-yl]phenyl]urea
746654-14-8P, 1-[3-[8-(4-Bromoimidazol-1 yl)imidazo[1,2-a]pyrazin-
6-yl]phenyl]-3-(4-chlorophenyl)urea 746654-15-9P,
4-Fluoro-N-[3-[8-(2-phenylimidazol-1-yl) midazo[1,2-a]pyrazin-6-
yl]phenyl]tenzamide 746654-16-0P, 3-Methoxy-N-[3-[8-(2-
phenylimidazol-1-yl)imidazo[1,2-a]pyrazi::-6-yl]phenyl]benzamide
746654-17-1P, 3-Methoxy-4-methyl-N-[3-[8 (2-phenylimidazol-1-
yl)imidazo(1,2-a)pyrazin-6-yl]phenyl]ben::amide 746654-18-2P,
N-[3-[8-(2-Phenylimidazol-1-yl)imidazo[1 2-a]pyrazin-6-yl]phenyl]benzamide
746654-19-3P, 2,6-Dimethyl-N-[3-[8-(2-ph::nylimidazol-1-
yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]ben::amide 746654-20-6P,
4-Fluoro-N-[3-[8-(2-p-tolylimidazol-1-yl imidazo[1,2-a]pyrazin-6-
yl]phenyl]kenzamide 746654-21-7P, 3-Methoxy-N-[3-[8-(2-p-
tolylimidazol-1-yl)imidazo[1,2-a]pyrazin 6-yl]phenyl]benzamide
746654-22-8P, 3-Methoxy-4-methyl-N-[3-[8 (2-p-tolylimidazol-1-
yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]ben::amide 746654-23-9P,
2-(4-Chlorcphenyl)-N-[3-[8-(2-phenylimidazol-1-yl)imidazo[1,2-a]pyrazin-6-
yl]phenyl]acetamide 746654-24-0P, 2-(4-Chlorophenyl)-N-[3-[8-[2-
(4-chlorophenyl)imidazol-1-yl]imidazo[1,::-a]pyrazin-6-yl]phenyl]acetanide
746654-25-1P, N-[3-[8-[2-(4-Chlorophenyl imidazol-1-yl]imidazo[1,2-
a]pyrazin-6-yl]phenyl]-2-(3-trifluoromethylphenyl)acetamide
746654-26-2P, 1-[3-[8-[2-(4-Chlorophenyl imidazol-1-yl]imidazo[1,2-
a]pyrazin-6-yl]phenyl]-3-[4-[(morpholin-4-yl)methyl]phenyl]urea
746654-27-3P, 1-(4-Chlorobenzyl)-3-[3-[8 [2-(4-
chlorophenyl)imidazol-1-yl]imidazo[1,2-a.pyrazin-6-yl]phenyl]urea
746654-28-4P, 1-[3-[8-[2-(4-Chlorophenyl imidazol-1-yl]imidazo[1,2-
a]pyrazin-6-yl]phenyl]-3-[4-(4-methylpip@razin-1-ylmethyl)phenyl]urea
RL: PAC (Pharmacological activity); SPN Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; preparation of heteroarylphenylimidazopyrazines as
   modulators of Hsp90 complex activity)
746653-81-€ CAPLUS
Urea, N-(2·methylphenyl)-N'-[3-[8-(4-phenyl-1H-imidazol-1-yl)imidazo[1,2-
a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)
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RN

CN

RN 746653-82-7 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-[8-(4-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-83-8 CAPLUS

CN Urea, N-[2-(methylth.o)phenyl]-N'-[3-[8-(2-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]pyr:zin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-84-9 CAPLUS

CN Urea, N-(2-methylphenyl)-N'-[3-[8-(2-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-85-0 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-[8-[4-(4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9Cl) (CA INDEX NAME)

RN 746653-86-1 CAPLUS

CN Urea, N-[3-[8-[4-(4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N' (2-methylphenyl)- (9CI) (CA INDEX NAME)

RN 746653-87-2 CAPLUS

CN Urea, N-(4-chloropheny.)-N'-[3-[8-[4-(4-methylpheny)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA II DEX NAME)

RN 746653-88-3 CAPLUS

CN Urea, N-(2-methylphenyl)-N'-[3-[8-[4-(4-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-89-4 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-[8-(4-methyl-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-90-7 CAPLUS
CN Urea, N-(3-chloro-4-fluorophenyl)-N'-[3-[8-[4-(4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9Cl) (CA INDEX NAME)

RN 746653-91-8 CA'LUS
CN Urea, N-(3-chlo:o-4-fluorophenyl)-N'-[3-[8-(4-phenyl-1H-imidazol-1-yl)imidazo[1,2-i]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-92-9 CAPLUS

CN Urea, N-[3-[8-[4-(4-chlo ophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6yl]phenyl]-N'-[4-[(4-met yl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 746653-93-0 CAPLUS

Urea, N-[3-[8-[4-(4-chlo ophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[4-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 746653-94-1 CAPLUS

Urea, N-[3-[8-[4-(4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6yl]phenyl]-N'-[4-[[(3-ethoxypropyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

EtO- (CH<sub>2</sub>)<sub>3</sub>-NH-CH<sub>2</sub>

$$NH-C-NH$$

$$N$$

$$N$$

$$N$$

$$N$$

$$C1$$

RN 746653-95-2 CAPLUS
CN Urea, N-(4-chlorophenyl)-N'-[3-[8-(3-phenyl-1H pyrazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phanyl]- (9CI) (CA INDEX NAME)

RN 746653-96-3 CAPLUS
CN Urea, N-(3-chloro 4-fluorophenyl)-N'-[3-[8-(3-1henyl-1H-pyrazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) :CA INDEX NAME)

- Rì 746653-97-4 CAPLUS
- Cr Urea, N-(3-chloro-4-fluoro henyl)-N'-[3-[8-(2-phenyl-1H-midazol-1-yl)imidazo[1,2-a]pyrazin-6 yl]phenyl]- (9CI) (CA INDEX JAME)

- RN 746653-98-5 CAPLUS
- CN Benzamide, 4-chloro-N-[3-[ -(2-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9 I) (CA INDEX NAME)

- RN 746653-99-6 CAPLUS
- CN Benzamide, 3-(4-morpholiny methyl)-N-[3-[8-(2-phenyl-1H-midazol-1-yl)imidazo[1,2-a]pyrazin-6 yl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

- RN 746654-00-2 CAPLUS
- CN Benzamide, 4-(4-morpholiny methyl)-N-[3-[8-(2-phenyl-1H-midazol-1-yl)imidazo[1,2-a]pyrazin-6 yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-01-3 CAPLUS

CN Urea, N-(3-chloro-4 fluorophenyl)-N'-[3-[8-[2-(4-nethylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a] yrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-02-4 CAPLUS

CN Urea, N-[3-[8-[2-(4 methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[3-(t ifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 746654-03-5 CAPLUS

CN Urea, N-[4-(4-morpholinylmethyl)phenyl]-N'-[3-[8-(2-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]py azin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-04-6 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6-[4-(4-morpholinylmethyl)phenyl]-8-(2-phenyl-1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)

RN 746654-05-7 CAPLUS

CN Urea, N-(4-chlorophenyl)-N'-[3-[8-[2-(2-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-06-8 CAPLUS

CN Urea, N-(3-chloro-4-fluorophenyl)-N'-[3-[8-[2-(2-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-07-9 CAPLUS

CN Urea, N-(4-chlorophen 1)-N'-[3-[8-[2-(2-methoxyphen/l)-1H-imidazol-1-yl]imidazo[1,2-a]pyra:in-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-08-0 CAPLUS

CN Urea, N-(4-chlorophen; 1)-N'-[3-[8-[2-(2-fluoropheny.)-1H-imidazol-1-yl]imidazo[1,2-a]pyra in-6-yl]phenyl]- (9CI) (CA I DEX NAME)

RN 746654-09-1 CAPLUS

CN Urea, N-(3-chloro-4-f uorophenyl)-N'-[3-[8-[2-(2-fl orophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]py:azin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-10-4 CAPLUS

CN Urea, N-[3-[8-[2-(2-fluorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[3-(trifluorometlyl)phenyl]- (9CI) (CA INDEX NAME)

RN 746654-11-5 CAPLUS

CN trea, N-[3-[8-[2-(2-methoxypheryl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 746654-12-6 CAPLUS

CN Usea, N-(4-chlorophenyl)-N'-[3-[8-[2-(1-methylethyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]rhenyl]- (9CI) (CA INDEX NAME)

RN746654-13-7 CAPLUS

CNUrea, N-(3-chloro-4-flucrophenyl)-N'-[3-[8-[2-(1-methylethyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA IMDEX NAME)

746654-14-8 CAPLUS RN

Urea, N-[3-[8-(4-bromo-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]-CN N'-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

RN

746654-15-9 CAPLUS
Benzamide, 4-fluoro-N-[3-[8-(2-phenyl-1H-imidazol-1-y])imidazo[1,2-CNa]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746 54-16-0 CAPLUS

CN Ben:amide, 3-methoxy-N-[3-[8-(2-pnenyl-1H-imidazol-1-yl)imidaz [1,2-a]p razin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746.54-17-1 CAPLUS

CN Ben:amide, 3-methoxy-4-methyl-N-[3-[8-(2-phenyl-1H-imidazol-1-yl) midazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746:54-18-2 CAPLUS

CN Ben.:amide, N-[3-[8-(2-phenyl-1H-inidazol-1-yl)imidazo[1,2-a]py azin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-19-3 CAPLUS

CN Benzamide, 2,6-dimethyl-N-[3-[8-(2-phenyl-1H-imidazol-1-yl)imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-20-6 CAPLUS

CN Benzamide, 4-fluoro-N-[3-[3-[2-(4-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-21-7 CAPLUS

CN Benzamide, 3-methoxy-N-[3-[8-[2-(4-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-22-8 CAPLUS

CN Benzaride, 3-methoxy-4-methyl-N-[3-[8-[2-(4-methylphenyl)-1H-imicazol-1-yl]im:dazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA INDEX NAME)

RN 746654-23-9 CAPLUS

CN Benzer eacetamide, 4-chloro-N-[3-[8- 2-phenyl-1H-imidazol-1-yl)im dazo[1,2-a]pyrazin-6-yl]phenyl]- (9CI) (CA NDEX NAME)

RN 746654-24-0 CAPLUS

CN Benzer eacetamide, 4-chloro-N-[3-[8-[2-(4-chlorophenyl)-1H-imidazcl-1-yl]imidazo[1,2-a]pyrazin-6-yl]pheny.]- (9CI) (CA INDEX NAME)

RN 746654-25-1 CAPLUS

CN Benzeneacetamide, N-[3-[8-[2 (4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-3-(tr.fluoromethyl)- (9CI) (CA INLEX NAME)

$$F_3C$$
  $CH_2-C-NH$   $N$   $N$   $N$ 

RN 746654-26-2 CAPLUS

CN Urea, N-[3-[8-[2-(4-chloroph:nyl)-1H-imidazol-1-yl]imidazc[1,2-a]pyrazin-6-yl]phenyl]-N'-[4-(4-morpholi:ylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 746654-27-3 CAPLUS

CN Urea, N-[3-[8-[2-(4-chlorophenyl)-1H-imidazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[(4-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 746654-28-4 CAPLUS

CN Urea, N-[3-[8-[2-(4-chlorophenyl)-1H- midazol-1-yl]imidazo[1,2-a]pyrazin-6-yl]phenyl]-N'-[4-[(4-methyl-1-piperaz nyl)methyl]phenyl]- (9CI) ((A INDEX NAME)

IT 63744-22-9P, 6,8-Dibromoimidazo[1,2-a pyrazine 63744-23-0P
 , 6,8-Dibromoimidazo[1,2-a]pyrazine h drobromide 746654-29-5P,
6-Bromo-8-(4-p-tolylimidazol-1-yl)imidazo[1,2-a]pyrazine
746654-30-8P, 3-[8-(4-p-Tolylimidazol 1-yl)imidazo[1,2-a]pyrazin-6-yl]phenylamine
 RL: RCT (Reactant); SPN (Synthetic pr:paration); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of hete oarylphenylimidazopyrazines as modulators of Hsp90 complex activity)

RN 63744-22-9 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6,8-dibromo- 9CI) (CA INDEX NAME)

RN 63744-23-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 6,8-dibromo-, hydrobromide (9CI) (CA INDEX NAME)

## ●> HBr

RN '46654-29-5 CAPLUS
CN .midazo[1,2-a]pyrazine, 6-bromo-8-[4-(4-methylphenyl)-1H-imidazol-1-yl]9CI) (CA INDEX NAME)

M

RN 46654-30-8 CAPLUS
CN lenzenamine, 3-[8-[4-(4-methylphenyl)-1H-imidazol-1-yl]imidazo[1,2| pyrazin-6-yl]- (9CI) (CA INDEX NAME)

TT 746654-31-9, 3-[8-(2-PhenylimiGazol-1-yl)imidazo[1,2-a]pyrazin-6yl]phenylamine

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of heteroarylphenylimidazopyrazines as modulators of Hsp90 complex activity

RN 746654-31-→ CAPLUS

Benzenamine, 3-[8-(2-phenyl-1H-imidazol 1-yl)imidazo[1,2-a]pyrazin-6-/l]-(9CI) (CA INDEX NAME)

L57 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:267339 CAPLUS

DOCUMENT NUMBER:

140:303700

TITLE:

CN

Preparation and pharmaceutical compositions of nc/el imidazopyrazines as cyclin dependent kinase inhibitors Paruch, Kamil; Guzi Timothy J.; Dwyer, Michael F.;

INVENTOR (S):

Paruch, Kamil; Guzi Timothy J.; Dwyer, Michael F.; Doll, Ronald J.; Gi. ijavallabhan, Viyyoor M.; Mallams,

Alan K.

PATENT ASSIGNEE(S):

Schering Corporation, USA PCT Int. Appl., 82 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

DOCUMENT TIPE:

English

LANGUAGE:

1

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.      | KIND DATE       | APPLICATION NO.               | DATE            |  |  |  |
|-----------------|-----------------|-------------------------------|-----------------|--|--|--|
| WO 2004026377   | A1 20040401     | WO 2003-US29209               | 20030919        |  |  |  |
| W: AE, AG, AL,  | AM, AT, AU, AZ, | BA, BB, BG, BR, BY,           | BZ, CA, CH, C1, |  |  |  |
| CO, CR, CZ,     | DE, DK, DM, DZ, | EC, EE, EG, ES, FI,           | GB, GD, GE, HR, |  |  |  |
|                 |                 | KR, KZ, LC, LK, LR,           |                 |  |  |  |
| MD, MG, MK,     | MN, MX, MZ, NI, | NO, NZ, PG, PH, PL,           | PT, RO, RU, SC, |  |  |  |
| SE, SG, SK,     | SL, SY, TJ, TM, | TN, TR, TT, TZ, UA,           | UZ, VC, VN, YJ, |  |  |  |
| ZA, ZM          |                 |                               |                 |  |  |  |
| RW: GH, GM, KE, | LS, MW, MZ, SD, | SL, SZ, TZ, UG, ZM,           | ZW, AM, AZ, BY, |  |  |  |
| KG, KZ, MD,     | RU, TJ, TM, AT, | BE, BG, CH, CY, CZ,           | DE, DK, EE, ES, |  |  |  |
| FI, FR, GB,     | GR, HU, IE, IT, | LU, MC, NL, PT, RO,           | SE, SI, SK, TR, |  |  |  |
| BF, BJ, CF,     | CG, CI, CM, GA, | GN, GQ, GW, ML, MR,           | NE, SN, TD, T3  |  |  |  |
| CA 2499756      |                 |                               |                 |  |  |  |
| US 2004063715   | A1 20040401     | 20040401 US 2003-665005 20030 |                 |  |  |  |
| US 6919341      | B2 20050719     |                               |                 |  |  |  |
| AU 2003272476   | A1 20040408     | AU 2003-272476                | 20030919        |  |  |  |
| EP 1543008      | A1 20050622     | EP 2003-754658                | 20030919        |  |  |  |
| R: AT, BE, CH,  | DE, DK, ES, FR, | GB, GR, IT, LI, LU,           | NL, SE, MC, Pf, |  |  |  |
| IE, SI, LT,     | LV, FI, RO, MK, | CY, AL, TR, BG, CZ,           | EE, HU, SK      |  |  |  |
| JP 2006507253   | T2 20060302     |                               |                 |  |  |  |
| US 2005130 780  | A1 20050616     |                               |                 |  |  |  |
| ZA 2005002375   | A 20050927      |                               |                 |  |  |  |

PRIORITY APPLN. INFO.:

US 2002-412997P P 20020923 US 2003-665005 A3 20030919

WO 2003-US29209 W 20030919

OTHER SOURCE(S):

MARPAT 140:3(3700

GI

AB In its many embodiments, the present invention provides a novel class of imidazo[1,2-a]pyrazine compds. of formula I [R = H, halo, (un)substituted-aryl, -heteroaryl, -cycloalkyl, etc.; R1 = H, nalo or alkyl; R2 = halo, (un)substitutec-alkyl, -aryl, -arylalkyl, etc.; R3 = H, (un)substituted-aryl, -heteroaryl, -heterocyclyl, etc.] as inhibitors of cyclin dependent kinases, method: of preparing such compds., plarmaceutical compns. containing one or more such compds., methods of preparing pharmaceutical

formulations comprising one or more such compds., and methods of treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs using such compds. or pharmaceutical compns. Thus, e.g., II was prepared by condensation of 8-chloro-3-methylimidazo[1,2a)pyrazine with 4-(aminomethyl)pyridine. I possessed excellent CDK inhibitory properties, e.g., II cemonstrated an IC50 value of 22.5 μM.

TC ICM C07D487-04

ICS A61K031-495; A61P035-00

CC 28-17 (Heterocyclic Compounds (Mcre Than One Hetero Atom)) Section cross-reference(s): 1, 63

IT Neuroglia, neoplasm

> (astrocytoma; preparation of imidazopyrazines as cyclin dependent kinase inhibitors)

IT Nerve, neoplasm

> (neuroblastoma; preparation of imidazopyrazines as cyclin dependent kinase inhibitors)

IT Antitumor agents Bladder, neoplasm Drug delivery systems Drug interactions Esophagus, neoplasm Gallbladder, neoplasm Hodgkin's disease Human Kidney, neoplasm Leukemia Liver, neoplasm Lung, neoplasm Mammary gland, neoplasm

```
Melanoma
    Myelodysplastic syndromes
       Neuroglia, neoplasm
     Ovary, neoplasm
     Pancreas, neoplasm
     Prostate gland, neoplasm
     Skin, neoplasm
     Stomach, necolasm
     Thyroid glani, neoplasm
        (preparation of imidazopyrazines as cy lin dependent kinase inhibito s)
IT
     63744-22-9P
                  108418-77-5P 108418-79-7P 117718-84-0P
     676361-04-9P 676361-05-0P 676361-07-2P
     676361-08-3P 676361-09-4P 676361-10-7P
     676361-11-8P
                   676361-13-0P
                                    676361-14-1"
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RAIT
     (Reactant or reagent)
        (intermediate; preparation of imidazop razines as cyclin dependent kinase
        inhibitors)
IT
     62-53-3, Aniline, reactions 70-11-1, Phonacyl bromide
     100-46-9, Aminomethylbenzene, reactions
                                               108-91-8, Cyclohexylamine,
                 109-85-3, 2-Methoxyethylamine 3731-51-9,
     2-Aminomethylpyridine
                             3731-52-0, 3-(Ami: omethyl) pyridine
                                                                    3731-53-1,
     4-(Aminometh/l)pyridine
                              10070-92-5, Pyr midine-5-carboxaldehyde
     13258-63-4, 4-(2-Aminoethyl)pyridine 20:62-51-5 20173-24-4, 3-(2-Aminoet yl)pyridine 24241-18-7 5 859-46-4 76537-38-7
     177662-76-9, 4-Methylsulfonylaniline hydrochloride
     672324-65-1
                   673857-28-8 676361-15-2 676361-16-3
     676361-17-4 576361-18-5 676361-19-6
     RL: RCT (Reastant); RACT (Reactant or reacent)
        (starting material; preparation of imicazopyrazines as cyclin dependent
        kinase inhibitors)
IT
     63744-22-9P 676361-05-0P 676361-07-2P
     676361-08-3P 676361-09-4P 676361-10-7P
     676361-11-8P
     RL: RCT (Reastant); SPN (Synthetic preparation); PREP (Preparation); RAST
     (Reactant or reagent)
        (intermed ate; preparation of imidazop razines as cyclin dependent k nase
        inhibitor 3)
RN
     63744-22-9
                CAPLUS
CN
     Imidazo[1,2-1]pyrazine, 6,8-dibromo- (9CI (CA INDEX NAME)
```

RN 676361-05-0 CAPLUS CN Imidazo[1,2-1]pyrazine, 8-chloro-6-phenyl (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
Ph & & \\
N & - & \\
\hline
C1 & & \\
\end{array}$$

RN 67636 -07-2 CAPLUS CN Imida:o[1,2-a]pyrazine, 8-chloro-6-(2-chlorophenyl)- (9CI) (CA NDEX NAME)

RN 67636 -08-3 CAPLUS CN Imida::o[1,2-a]pyrazine, 3-bromo-8-chloro-6-phenyl- (9CI) (CA IN EX NAME)

$$\begin{array}{c|c} Ph & 3r \\ N & = N \end{array}$$

RN 67636 -09-4 CAPLUS
CN Imida::o[1,2-a]pyrazine, 3-bromo-8-chloro-6-(2-chlorophenyl)- (9C) (CA INDEX NAME)

RN 676361-10-7 CAPLUS CN Imida::o[1,2-a]pyrazine, 8-chloro-3-iodo-6-phenyl- (9CI) (CA IND::X NAME)

RN 676361-11-8 C PLUS

CN Imidazo[1,2-a] yrazine, 8-chloro-6-(2-chlorophenyl)-3-iodo- (9CI) (CA INDEX NAME)

IT 76537-38-7 676 61-15-2 676361-16-3

676361-17-4 676361-18-5 676361-19-6

RL: RCT (Reactant); RACT (Reactant or reagert)
(starting material; preparation of imidar opyrazines as cyclin dependent kinase inhibitors)

RN 76537-38-7 CAPLUS

CN Imidazo[1,2-a];pyrazine, 8-chloro-3-methyl- 9CI) (CA INDEX NAME)

RN 676361-15-2 CAPLUS

CN Imidazo[1,2-a];yrazine, 3,8-dichloro-6-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

RN 676361-16-3 C. PLUS

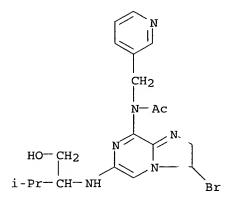
CN Acetamice, N-[3-bromo-6-[2-(2-hydroxy:thyl)-1-piperidinyl]imidazo[,2-a]pyraz:n-8-yl]-N-(3-pyridinylmethyl) (9CI) (CA INDEX NAME)

- RN 676361-37-4 CAPLUS
- CN Acetamice, N-[3-bromo-6-[(2-hydroxycy:lohexyl)amino]imidazo[1,2-a]; yrazin-8-yl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

- RN 676361-18-5 CAPLUS
- CN Acetamice, N-[3-bromo-6-[[2-(hydroxymethyl)cyclohexyl]amino]imidazc[1,2-a]pyrazin-8-yl]-N-(3-pyridinylmethyl) (9CI) (CA INDEX NAME)

RN 676361-19-6 CAP. US

CN Acetamide, N-[3-!romo-6-[[1-(hydroxymethyl)-2-methylpropyl]ami:o]imidazo[1,2-a]pyrazin-8-yl]-N-(3-pyridinylmethyl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:267246 CAPLUS

DOCUMENT NUMBER: 140:303696

TITLE: Preparation and pharmaceutical compositions of novel

imidazopyrazines as cyclin dependent kinase inhibitors

INVENTOR(S): Paruch, Kamil; Guzi, Timothy J.; Dwyer, Michael P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor M.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2004026310 | A1   | 20040401 | WO 2003-US29456 | 20030919 |
| WO 2004026310 | C1   | 20050630 |                 |          |

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PRIORITY APPLN. INFO.:
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OTHER SOURCE(S):

MARPAT 140:303696

GI

- In its mar, embodiments, the present invention provides a novel class of imidazo[1,2-a]pyrazine compds. I [R = C=3, (un)substituted-alkyl, -heteroaryl, -heteroarylalkyl, -cycloalkyl, -heterocyclyl, etc.; R1 = H, halo or alkyl; R2 = H, halo, CN, cycloalkyl, heterocyclyl, alkynyl and CF3; R3 = aryl (with exception of Ph), (un)substituted-heteroaryl (with exception of furyl), -heterocyclyl, etc.] as inhibitors of cyclin dependent kinases, methods of preparing such compds., pharmaceutical compns. containing one or more such compds., methods of preparing pharmaceutical formulations comprising one or more such compds., and methods of treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs using such compds. or pharmaceutical compns. Thus, e.g., II was prepared by substitution of 8-chloro-6-methylimidzol[1,2-a]pyrazine with 3-(aminomethyl)pyridine. Methods for performing assa/s with I are described (no data).
- IC ICM A61K031-5025
- ICS A61K031-407; A61K031-4406; A61K031-4427; C07D487-04
- CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
   Section cross-reference(s): 1, 63
- IT Neuroglia, neoplasm

(astrocytoma; preparation of imidazopyrazines as cyclin dependent kinase inhibitors)

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IT
    Nerve, neoplasm
        (neuroblastoma; preparation of imidazopyrazin s as cyclin
        dependent kinas inhibitors)
     Antitumor agents
TT
     Bladder, neoplasm
     Drug delivery syst ms
     Drug interactions
     Esophagus, neoplas
     Gallbladder, neopl sm
     Hodgkin's disease
     Human
     Kidney, neoplasm
     Leukemia
     Liver, neoplasm
     Lung, neoplasm
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     Melanoma
     Myelodysplastic syldromes
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     Prostate gland, necplasm
     Skin, neoplasm
     Stomach, neoplasm
     Thyroid gland, neo; lasm
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IT
     3731-52-0, 3-(Aminemethyl)pyridine 143591-86-0
     676132-60-8 676132-61-9 676132-62-0
     676132-63-1 676132-64-2 676132-65-3
     676132-66-4 676132-67-5 676132-68-6
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        (starting mater al; preparation of novel imid zopyrazines as cyclin
        dependent kinase inhibitors)
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     676132-68-6
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        (starting mater al; preparation of novel imid zopyrazines as cyclin
        dependent kinase inhibitors)
RN
     143591-86-0 CAPLUS
     Imidazo[1,2-a]pyra:ine, 8-chloro-6-methyl- (9CI) (CA INDEX NAME)
CN
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676132-60-8 CAPLUS RN Imidazo[1,2-a]pyrazine, 8-chloro-6-(1,1-dimethylethyl)- (9CI) (CA INDEX CNNAME)

RN 676132-61-9 CAPLUS

CN Imidazo[1,2.a]pyrazine, 8-chloro-6-ethyl- (9CI) (CA INDEX NAME)

RN 676132-62-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 8-chloro-6-(cyclo exylmethyl) - (9CI) (CA INDEX NAME)

RN 676132-63-1 CAPLUS

CN Imidazo[1,2-1]pyrazine, 8-chloro-6-(pheny methyl) - (9CI) (CA INDEX NAME)

RN 676132-64-2 CAPLUS

CN Acetamide, N-(3-bromo-6-methylimidazo[1,2 a]pyrazin-8-yl)-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 676132-65-3 CAPLUS

CN Acetamide, N-[3-bromo-6-(1,1-dimethylethyl)imidazo-1,2-a]pyrazin-8-yl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 676132-66-4 CAPLUS

CN Acetamide, N-(3-bromo·6-ethylimidazo[1,2-a]pyrazin-8-yl)-N-(3-pyridinylmethyl)- (9C1) (CA INDEX NAME)

RN 676132-67-5 CAPLUS

CN Acetamide, N-[3-bromo-6-(cyclohexylmethyl)imidazo[1,2-a]pyrazin-8-yl]-N-(3-pyridinylmethyl)- (9Cl) (CA INDEX NAME)

RN 676132-68-6 (APLUS

CN Acetamide, N-13-bromo-6-(phenylmethyl)imida: o[1,2-a]pyrazin-8-yl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITAT ONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:796660 CAPLUS

DOCUMENT NUMBER:

139:307796

TITLE:

Preparation of aminoacy imidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment

or prevention of diabet s

INVENTOR(S):

Brockunier, Linda L.; Diffy, Joseph L.; Kim, Dooseop;

Parmee, Emma R.; Weber, Ann E.

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

PCT Int. Appl., 84 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. CO JNT:

PATENT INFORMATION:

| PATENT NO.    | KIND       | DATE         | APPL CATION NO.       | DATE           |
|---------------|------------|--------------|-----------------------|----------------|
| PATENT NO.    | KIND       | DATE         | APPL CATION NO.       | DATE           |
|               |            |              |                       |                |
| WO 2003082817 | A2         | 20031009     | WO 2(03-US8723        | 20030321       |
| WO 2003082817 | A3         | 20031218     |                       |                |
| W: AE, AG,    | AL, AM, AT | , AU, AZ, BA | A. BB. BG. BR. BY. BZ | Z. CA. CH. CN. |

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             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
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PRIORITY APPLN. INFO.:
                                             US 2002-367410P
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                                             WO 2003-US8723
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                                                                    20030321
                         MAR 'AT 139:307796
OTHER SOURCE(S):
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GI

- Title compds. I [Ar = (\in) substituted Ph; X = N, (\in) substituted CH2; R1 = AB H, CN, (un) substituted alkyl, Ph, heterocyclic; R2, R3 = H, CN, (un) substituted alkyl, 'h, naphthyl, CO2H, CONH2, cycloalkyl] were prepared for use as dipeptidyl poptidase-IV inhibitors in the treatment or prevention of diseases, such as diabetes and particularly type 2 diabetes. Thus, 6-benzyl-3-methyl 5,6,7,8-tetrahydroimidazo[1,2-a]pyrazine was prepared in 5 steps from 2-benzyloxirane and was acylated with (R)-3,4-F2C6H3CH2CH(NHC)2CMe3)CH2CO2H and deblocked to give the imidazopyrazine II.
- IC ICM C07D211-36 ICS A61K031-495
- 28-17 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference s): 1
- IT Nerve, disease

(neuropathy; prepara ion of aminoacylimidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment or prevention of diametes)

59303-10-5P, IT 19848-54-5P 20721-17-9P, 2-Hydroxy-5-methyl, razine 2-Chloro-5-methylpyrazine 132871-52-4P 16:124-42-5P 476620-55-0P, 2-Bromo-4,5-difluorobenzyl alcohol 486459-98-7P 486459-99-8P 486460-00-8P 486460-02-0P 486460-03-1P 436460-04-2P 486460-05-3P 486460-06-4P 486460-07-5P 486460-08-6P 436460-09-7P 486460-24-6P 611240-48-3P 611240-46-1P 611240-47-2P €11240-49-4P 611240-50-7P (11240-54-1P 611240-55-2P 611240-51-8P 611240-52-9P 611240-53-0P 611240-56-3P €11240-59-6P 611240-60-9P 611240-57-4P 611240-58-5P 611240-61-0P 611240-65-4P 611240-62-1P 611240-63-2P €11240-64-3P 611240-66-5P 611240-67-6P 611240-68-7P 611240-69-8P 611240-70-1P 611240-71-2P 611240-72-3P 613240-73-4P €11240-77-8P 611240-74-5P 611240-76-7P 611240-78-9P 611240-75-6P 611240-83-6P 611240-84-7P €11240-85-8P 611240-81-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of aminoacylimidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment or prevention of diabetes) TΤ 611240-68-7P 611240-69-8P 611240-71-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of aminoacylimidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment or prevention of diabetes) 611240-68-7 CAPLUS ŔŊ Imidazo[1,2-a]pyrazine, 8-chloro-2-(trifluoromethyl)- (9CI) (CA INDEX CN NAME)

RN 611240-69-8 CAPLUS
CN Imidazo[1,2-a]pyrazine, 8-methyl-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 611240-71-2 CAPLUS
CN Imidazo[1,2-a]pyrazine, 8-(4-fluorophenyl)-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

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CF<sub>3</sub>
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157 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN
                         2003: 37761 CAPLUS
CCESSION NUMBER:
! OCUMENT NUMBER:
                         139:2:1331
                         Preparation of 3-(tricyclic fused heteroaryl)
'ITLE:
                         4-het roaryl substituted 2,5-dioxog/rroles as
                         GSK-3| kinase inhibitors
                         Clayton, Joshua Ryan; Diefenbacher, Clive Gideon;
. NVENTOR (S):
                         Engle , Thomas Albert; Furness, Kelly Wayne; Henry,
                         James Robert; Malhotra, Sushant; Marquart, Angela
                         Lynn; McLean, Johnathan Alexander; Mendel, David;
                         Burkh lder, Timothy Paul; Li, Yihor 3; Reel, Jon Kevin
                         Eli L lly and Company, USA; et al.
FATENT ASSIGNEE(S):
: OURCE:
                         PCT I: t. Appl., 161 pp.
                         CODEN PIXXD2
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FAMILY ACC. NUM. COUNT:
ATENT INFORMATION:
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FRIORITY APPLN. INFO.:
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( THER SOURCE (S):
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABL ? VIA OFFLINE PRINT *
AB
     The title compds. I; R1 = H, halo, alkyl; m = 0 4; R = (CH2)n, CHMe,
     CMe2, CH2Q1CH2, CHCHCHCHCH2; Q1 = CHOH, CO; n = 0-4; WXY = (CH2)3,
     (un) substituted CH: NHCH2, NHCOCH2, etc.; Ar = benzofuryl, benzothienyl,
     indolyl, etc.], useful for treating GSK-3β mediated diseases such as
     diabetes and Alzheimer's disease, were prepared Thus, treating
     3-(6,7-dihydro-6H- 1,4]diazepino[6,7,1-hj]indol-1-yl)-4-(imidazo[1,2-
     a]pyridin-3-yl)pyr:ole-2,5-dione dihydrochloride (preparation given) with di-1h
     cyanocarbonimidate in the presence of Et3N in is - PrOH followed by addition
     of morpholine afforded II. The exemplified compds. I exhibit IC50 of
     ≤ 0.2 µM against GSK-2β. Pharmaceutical composition comprising
     the compound I was claimed.
TC
     ICM C07D487-06
     ICS A61P025-08
    28-21 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
ST
     tricyclic fused heteroaryl dioxopyrrole prepn GSK3beta protein kinase
     inhibitor; pyrrolecione heteroaryl prepn GSK3beta inhibitor antidiabetic
     Alzheimer's diseas∈
    Anti-Alzheimer's agents
TT
    Antidiabetic agent:
    Human
        (preparation of 3-(tricyclic fused heteroaryl 4-heteroaryl substituted
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2,5-dioxopyrroles as GSK-3 $\beta$  kinase inhibitors Alzheimer's disease

IT

Diabetes mellitus

(treatment of; Preparation of 3-(tricyclic fused heteroary1) 4-heteroary1 substituted 2,5 dioxopyrroles as GSK-3β kinase inhibitors)

IT 603263-19-0P 603163-27-0P 603263-35-0P 603163-43-0P 603263-51-0P 603263-58-7P 603163-66-7P 603263-74-7P 603163-92-9P 603263-99-6P

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     (Therapeutic use); BIOL (Biclogical study); PREP (Preparation); USES
     (Uses)
        (preparation of 3-(tricy(lic fused heteroaryl) 4-heteroaryl substituted
        2,5-dioxopyrroles as GSK-3β kinase inhibitors)
ΙT
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    RL: PAC (Pharmacolog cal activity); SPN (Synthetic preparation); THU
     (Therapeutic use); B OL (Biological study); PREP ('reparation); USES
     (Uses)
       (preparation of 3 (tricyclic fused heteroaryl) +-heteroaryl substituted
       2,5-dioxopyrroles as GSK-3\beta kinase inhibitors)
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    394-69-4P, 5-Fluorog inoline 395-81-3P, 5-Fluoro 2-nitrobenzaldehyde
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                                                      2343-23-9P
    3349-64-2P
                4424-80 OP, 1,3,4,5-Tetrahydrobenzo[b azepin-2-one
                 5840-01 7P, 5,6-Dihydro-4H-pyrrolo[3,?,1-ij]quinoline
    5817-85-6P
    10133-25-2P, Benzo[b.thiophene-4-carboxaldehyde]
                                                     .0134-91-5P,
    Benzo[b] thiophene-7-carboxaldehyde 10167-97-2P, !-Amino-5-
    methoxypyridine
                      17.81-50-9P, Benzo[b] thiophene-4 acetonitrile
    17381-53-2P, Benzo[b thiophene-7-acetonitrile 19:55-60-8P 21801-85-4P
    21801-86-5P, Imidazo 1,2-a]pyridine-3-acetamide 2250-48-2P
    22780-71-8P, Benzo[b.thiophene-7-carbonitrile 24317-64-4P,
                                           28740-77-4
    2-Amino-3-cyanopyrid ne
                              28740-75-2P
                                                         28740-85-4P
    34784-04-8P, 5-Bromo soquinoline 39597-67-6P, 1H Indole-7-acetamide
    59254-24-9P, 4-Metho: ybenzofuran-7-carboxaldehyde 59611-52-8P,
    6-Fluoro-1,2,3,4-tet:ahydroquinoline 72995-16-5P 5-Chloro-1,2,3,4-
    tetrahydroquinoline
                         82199-98-2P, (1H-Indol-7-yl) cetonitrile
                  84549-(3-1P, 7-Benzofuranacetonitril: 94239-08-4P,
    84548-94-7P
    7-Vinylindole
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                                 101820-69-3P
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                                                               116476-45-0P
                   12473(-53-6P, 5,6-Dihydro-4H-pyrrol)[3,2,1-ij]quinoline-1-
    116939-11-8P
    carboxylic acid ethy ester 124730-54-7P, 4,5,6,'-
Tetrahydroazepino[3,:,1-hi]indole-1-carboxylic acil
                                                         124730-56-9P,
    5,6-Dihydro-4H-pyrro.o[3,2,1-ij]quinoline-1-carbox/lic acid
    133994-99-7P, 1-Meth l-1H-indole-4-carboxaldehyde 136117-93-6P
   152712-40-8P, 4,5,6, -Tetrahydroazepino[3,2,1-hi]i dole-1-carboxylic acid
                  152712 44-2P
    ethyl ester
                               152712-45-3P, 2-Oxo-3 (2,3,4,5-
    tetrahydrobenzo[b]az:pin-1-yl)propionic acid ethyl ester
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    214894-99-2P
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    5-Methyl-1H-indole-7 carboxaldehyde
                                         345232-22-6P 1-(Pent-4-en-1-yl)-7-
    vinyl-1H-indole
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                   345264-52-0P, 1H-Indole-7-ethanol 345264-53-1P
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                                 345264-59-7P, 8-Chlo o-5,6-dihydro-4H-
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    pyrrolo[3,2,1-ij]quiroline
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    5-Fluoro-1,2,3,4-tet:ahydroquinoline 345264-62-2, 7-Fluoro-5,6-dihydro-
    4H-pyrrolo[3,2,1-ij] quinoline 345264-63-3P 345:64-64-4P,
    8-Fluoro-5,6-dihydro 4H-pyrrolo[3,2,1-ij]quinoline
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    345264-90-6P
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                   55515! -03-8P
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    (Tetrahydropyranyloxy) benzofuran-7-carboxaldehyde
                                                       555155-07-2P,
    4-Fluorobenzofuran-7 carboxaldehyde 555155-08-3P 5-Fluorobenzofuran-7-
    carboxaldehyde 555155-09-4P, 6-Fluorobenzofuran-'-carboxaldehyde
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55155-10-7P, 4,5-Difluorobenz ofuran-7-carboxaldehyde
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 ,6-Difluorobenzofuran-7-carbcxaldehyde 555155-13-0P
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               602299-23-0P, 7-Chloro-5,6-dihydro-4H-pyrrol [3,2,1-
 90417-55-3P
 j]quinoline
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-Bromo-5H-furo[3,2-c]pyridin-4-one
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             603301-13-9P
                            6C3301-16-2P
                                           603301-22-0P
·]pyridine
                                                           6 3301-25-3P
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 03302-69-8P, Furo[3,2-c]pyricine-7-acetonitrile
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'uro[3,2-c]pyridine-7-carbonitrile
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arboxylic acid
                  603302-91-6F, Furo[3,2-c]pyridine-7-metha.ol
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senzo(b) thiophene-7-acetamide
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 03303-96-4P, 7-Benzofuranacet amide
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cetamide
            603304-06-9P, Furc [3,2-c] pyridine-7-acetamide
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 midazo[2,1-b]thiazole-3-acetamide
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hieno[3,2-b]pyridine-7-acetamide
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603309-31-5P, Imidazo[1,2-a]pyrazine-3-acetamide
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 L: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 Reactant or reagent)
   (preparation of 3-(tricyclic fused heteroaryl) 4-heteroaryl substituted
   2,5-dioxopyrroles as GSK-3β kinase inhibitors)
603272-35-1P 603287-32-7P 603287-38-3P
EL: PAC (Pharmacological activity); SPN (Synthetic preparat on); THU
 Therapeutic use); BIOL (Biological study); PREP (Preparati n); USES
 Uses)
   (preparation of 3-(tricyclic fused heteroaryl) 4-heteroaryl substituted
   2,5-dioxopyrroles as GSK-3β kinase inhibitors)
· 03272-35-1 CAPLUS
 H-Pyrrole-2,5-dione, 3-imidaz>[1,2-a]pyrazin-3-yl-4-(1,2,3 4-
etrahydropyrrolo[3,2,1-jk][1,4]benzodiazepin-7-yl)-, dihyd ochloride
      (CA INDEX NAME)
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IT

RN

CN

## •2 HCl

RN 603287-32-7 CAPLUS
CN Pyrrolo[3,2,1-jk][1,4] enzodiazepine, 7-(2,5-dihydro 4-imidazo[1,2-a]pyrazin-3-yl-2,5-dio: 5-1H-pyrrol-3-yl)-1,2,3,4-tet ahydro-2-(4-morpholinylcarbonyl)- 9CI) (CA INDEX NAME)

RN 603287-38-3 CAPLUS
CN Pyrrolo[3,2,1-jk][1,4]lenzodiazepine, 7-(2,5-dihydro 4-imidazo[1,2-a]pyrazin-3-yl-2,5-dio> >-1H-pyrrol-3-yl)-1,2,3,4-tet ahydro-2-(1-piperidinylcarbonyl)- 9CI) (CA INDEX NAME)

60:309-31-5P, Imidazo[1,2-a]pyrazine-3-acetamide IT RL RCT (Reactant); SPN (Synthetic preparation); PREP (Prepar tion); RACT (R actant or reagent) (preparation of 3-(tricyclic fused heteroary1) 4-heteroary substituted 2,5-dioxopyrroles as GSK-3β kinase inhibitors) 60'309-31-5 CAPLUS

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Im dazo[1,2-a]pyrazine-3-acetami le (9CI) (CA INDEX NAME) CN

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILA LE FOR THIS RECORL. ALL CITATIONS AVAILABLE IN HE RE FORMAT

L57 AN: WER 13 OF 22 CAPLUS COPYRIC IT 2006 ACS on STN

2003:678814 CAPLUS ACCESSION NUMBER:

DOCUMEN NUMBER: 139:214613

Preparation of N-(azabicyclyl)arylamides or TITLE:

therapeutic use as nicotinic acetylcholing receptor

Rogers, Bruc : N.; Piotrowski, David W.; Walker, Daniel INVENTO (S):

P.; Jacobser. Eric Jon; Acker, Brad A.; W shka, Donn

G.; Groppi, /incent E., Jr.

PATENT / SSIGNEE(S): Pharmacia & Jpjohn Company, USA

SOURCE: PCT Int. Appl., 167 pp.

CODEN: PIXXE 2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY / CC. NUM. COUNT:

PATENT NFORMATION:

PA~ENT NO. KIND DATE APPLICATION NO. DATE

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THER SOURCE(S):
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.B N-(azabicyclyl)arylamides such as RNR1C(:X)W [R = azalicyclyl; R1 = H, alkyl, cycloalkyl, haloalkyl, aryl; W = heteroaryl; X = O, S], were prepared for therapeutic use as nicotinic acetylcholine receptor agonists. These amides are useful for the treatment of central nervous system disorders, such as cognitive and attention deficit symptoms of Alzheimer's, neurodegeneration associated with diseases such as Alzheimer 's disease, pre-senile dementia (mild cognitive impair ent), senile dementia, schizophrenia, psychosis, attention deficit disorder, attention deficit hyperactivity disorder, mood and affective disorders, amyourophic lateral sclerosis, bonderline personality disorder, traumatic brain injury, behavioral and cognitive problems associated with brain tumors, AIDS dementia complex, dementia associated with Down's syndrome, dementia associated with Lewy Bodies, Hunting on's disease, depression, general anxiety disorder, age-related macular degeneration, Parkinson's disease, tardive dyskinesia, Pick's disease, post traumatic stress disorder, dysregulation of food intake including bulimia and anorexia nervosa, withdrawal symptoms associated with smoking cossation and dependent drug cossation, Gilles de la

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Tour tte's Syndrome, glaucoma, neurodegeneration associated wit.
     glau oma, or symptoms associated with pain. Thus, the hydrochl ride salt of
     amid, I was prepared via a multist p synthetic sequence which c ncluded with
     an a idation reaction of pyrrolo[1.2-c]pyrimidine-3-carboxylic cid
     hydr chloride with (R)-(+)-3-amin quinuclidine dihydrochloride sing
     diph nylphosphinic chloride and Et 3N in THF. The prepared amid s were
     assa ed for human \alpha7-5HT3 recepto: binding activity.
IC
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     ICS A61K031-439; A61K031-4985; A61P025-18
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     Sect on cross-reference(s): 1, 27, 28, 63
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    Mental and behavioral disorders
IT
        (.IDS dementia, treatment; preparation of N-
        (, zabicyclyl) arylamides for the rapeutic use as nicotinic ace: ylcholine
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IT
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IT
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     Alzheimer's disease
IΤ
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                                588725 46-6P
                                                588725-47-7P
                                                                588725-48-8P
588725 · 49-9P
                588725-50-2P 588725-51-3P
                                              588725-52-4P
```

588725 · 53-5P 588725-54-6P 588725 55-7P 588725-56-8P 588725-57-9P 588725-58-0P 588725-59-1P 588725 60-4P 588725-61-5P 588725-62-6P 588725-63-7P 588725-64-8P 588725 65-9P 588725-66-0P 588725-67-1P 588725-68-2P 588725-69-3P 588725 70-6P 588725-71-7P 588725-72-8P 588725-73-9P 588725-74-0P 588725 75-1P 588725-76-2P 588725 -77 - 3P 588725 - 78-4P 588725-79-5P 588725 80-8P 588725-81-9P 588725-82-0P 588725-33-1P 588725-84-2P 588725 85-3P 588725-86-4P 588725 -87-5P 588725-38-6P **588725-89-7P** 588725-90-0P 588725-91-1P 588725-92-2P 588725-93-3P 588725 94-4P 588725-95-5P 588725-96-6P 588725-97-7P 588725-98-8P 588725 99-9P 588726-00-5P 588726-01-6P 588726- 32-7P 588726-03-8P 588726 04-9P 588726-05-0P 588726 - 06 - 1P 588726-37-2P 588726-08-3P 588726 09-4P 588726-10-7P 588726 -11-8P 588726 -16-3P 588726-12-9P 588726-13-0P 588726 14-1P 588726-15-2P

IT

588726 19-6P

588726 24-3P

588726 29-8P

588726-20-9P

588726-25-4P

588726-30-1P

588726-18-5P

588726-23-2P

588726-28-7P

588726-17-4P

588726 · 22-1P

588726-27-6P

588726 -21-0P

588726 - 26 - 5P

588726 - 31 - 2P

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588726-32-3P
                    588726-33-4P
                                   588726-34-5P
                                                  588726-35-6P
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     588726-37-8P
                    588726-38-9P
                                   588726-39-0P
                                                  588726-40-3P
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     588726-42-5P
                    588726-43-6P
                                   588726-44-7P
                                                  588726-45-8P
                                                                 588726-46-9P
     588726-47-0P
                    588726-48-1P
                                   588726-49-2P
                                                  588726-50-5P
                                                                 588726-51-6P
     588726-52-7P
                    588726-53-8P
                                   588726-54-9P
                                                  588726-55-0P
                                                                 588726-56-1P
     588726-57-2P
                    588726-58-3P
                                   588726-59-4P
                                                  588726-60-7P
                                                                 588726-61-8P
     588726-62-9P
                    588726-63-0P
                                   588726-64-1P
                                                  588726-65-2P
                                                                 588726-66-3P
     588726-67-4P
                    588726-68-5P
                                   588726-69-6P
                                                  588726-70-9P
                                                                 588726-71-0P
     588726-72-1P
                    588726-73-2P
                                   588726-74-3P
                                                  588726-75-4P
                                                                 588726-76-5P
     588726-77-6P
                    588726-78-7P 538726-79-8P 588726-80-1P
     588726-81-2P
                    588726-82-3P
                                   588726-84-5P
                                                  588726-85-6P
                                                                 588726-86-7P
     588726-87-8P
                    588726-88-9P
                                   588726-89-0P
                                                  588726-90-3P
                                                                 588726-91-4P
     588726-92-5P
                    588726-93-6P
                                   588726-94-7P
                                                  588726-95-8P
                                                                 588726-96-9P
     588726-97-0P
                    588726-98-1P
                                   588726-99-2P
                                                  588727-00-8P
                                                                 588727-01-9P
     588727-81-5P
     RL: PAC (Pharmacological acti ity); SPN (Synthetic prepara: ion); THU
     (Therapeutic use); BIOL (Biol gical study); PREP (Preparat on); USES
     (Uses)
        (preparation of N-(azabicy lyl)arylamides for therapeut. z use as nicotinic
       acetylcholine receptor ago:ists)
TΥ
     19005-93-7P, 1H-Indole-2-carb xaldehyde
                                               21472-88-8P, Eth l
     5-hydroxy-6-oxo-1,2,3,6-tetra ydropyridine-4-carboxylate
                                                                21473-14-3P
     21473-16-5P, exo-1-Azabicyclo 2.2.1]heptan-3-ol
                                                       21492-03 5P,
                                         23680-40-2P, Methyl
     cis-4-(Hydroxymethyl)piperidi :-3-ol
                            24621- 0-3P, 1H-Indole-2-methanol
     3-bromo-2-propynoate
                                                                10789-79-5P,
     2-(Benzoyloxy)-1-nitroethane
                                   49668-89-5P, Methyl 6-methy nicotinate
              56026-36-9P, Methyl 6-(hydroxymethyl) nicotinate
                                                                 63362-34-5P,
     Methyl 6-(acetyloxymethyl)nic tinate 66182-01-2P, Ethyl
     indolizine-6-carboxylate 74 14-62-3P, Ethyl 9H-β-carboli: e-3-
                   94413-64-6P, Me hyl 2-cyanoisonicotinate
     carboxylate
                                                             9-413-69-1P
     107407-80-7P, Ethyl pyrrolo[1 2-c]pyrimidine-3-carboxylate
                                                                 129975-13-9P,
     trans-4-Nitro-1-(phenylmethyl -3-pyrrolidineacetic acid et)yl ester
     131489-60-6P, Ethyl (E)-4-(be:zylamino)-2-butenoate 1361 7-69-6P
     139022-25-6P, Imidazo[1,2-a]p ridine-6-carboxylic acid
                                                              1 9183-87-2P,
     Methyl 6-(aminomethyl)nicotin te 139183-89-4P, Methyl
     imidazo[1,5-a]pyridine-6-carb xylate
                                            144017-84-5P, trans 4-Amino-1-
     (phenylmethyl) -3-pyrrolidinea etic acid ethyl ester
                                                           1535 € 6-63-3P,
     (3R) -1-((S) -1-Phenethyl) -3-(c anomethyl)pyrrolidine
                                                           1537 \ J-28-0P, Ethyl
     pyrrolo[1,2-a]pyrazine-3-carb xylate
                                            156571-65-2P, Ethyl
     3-ethoxy-O-ethyl-N-(1H-indol- -ylmethylene)-DL-serinate
                                                               73340-19-7P,
     (3S)-1-((S)-1-Phenethyl)-5-oxa-3-pyrrolidinecarboxylic acic
     173724-95-3P, (3S)-1-((S)-1-P:.enethyl)-3-(hydroxymethyl)py:rolidine
     174676-79-0P, (3R)-Methyl 1-(S)-1-phenylethyl)pyrrolidine 3-acetate
                    191150-86-4P, enzyl cis-3-hydroxy-4-[(4-
     L81873-33-6P
     nethylphenyl) sulfonyloxymethy | piperidine-1-carboxylate
                                                               <sup>91150-87-5P</sup>,
     3enzyl cis-3-hydroxy-4-(hydro.ymethyl)piperidine-1-carboxy.ate
     197080-73-2P
                   206989-54-0P, :ert-Butyl 4-(2-oxopropyl)pip@ridine-1-
     carboxylate
                                .56935-76-9P, Imidazo[1,5-a]pyridine-6-
                   221128-29-6P
                      384831-56-50, Methyl 6-(azidomethyl)nicotinate
     carboxylic acid
     473795-29-8P, trans-(tert-But exycarbonylamino)-4-(2-hydrox)ethyl)-1-(N-
     phenylmethyl)pyrrolidine 47 795-30-1P, (+)-trans-3-(tert
    3utoxycarbonylamino) -4-(2-hyd:oxyethyl) -1-(phenylmethyl)py: rolidine
     473795-31-2P, (-)-trans-3-(te-t-Butoxycarbonylamino)-4-(2-)ydroxyethyl)-1-
                                4 3795-32-3P, exo-3-(tert-Buto) yearbonylamino)-
     (phenylmethyl)pyrrolidine
     1-azabicyclo[2.2.1]heptane
                                --73795-33-4P
                                                 473795-35-6P,
     endo-3-Azido-1-azabicyclo[2.2 1]heptane
                                              473795-36-7P
                                                              4° 3795-39-0P,
    endo-1-Azabicyclo[3.2.1]octan 3-amine dihydrochloride
                                                             47:795-46-9P,
     1-Bromo-3-piperidin-4-ylaceto: e trifluoroacetate
                                                      478149-39-2P,
     (2S, 3R) -2-Methyl-1-azabicyclo 2.2.2]octan-3-amine dihydrocl loride
     500556-90-1P
                   500556-91-2P 500556-92-3P
                                                 500556-94-5P
                                                                500556-95-6P
```

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508201-4: ·8P, (3S)-1-((S)-1-Phenethyl) 3-(chloromethyl)pyrrolidine
    508201-5: 3P, (5R)-1-Azabicyclo[3.2.1] ctan-3-one hydrochloride
    508201-5--5P, (5R)-3-0xo-1-((1S)-1-phe ylethyl)-1-
    azoniabic/clo[3.2.1]octane chloride
                                            08201-56-7P, (3R,5R)-1-
    Azabicyc o[3.2.1]octan-3-amine dihydrc hloride
                                                     508201-58-9P.
    1-Azabicyclo[3.2.2] nonan-3-amine bis(4 methylbenzenesulfonate)
     521278-1: -9P
                   524011-82-3P, 1-Azabicy lo[3.2.1]octan-3-amine
     588720-1( 9P, Ethyl 7-chloropyrrolo[1, -c]pyrimidine-3-carboxylate
     588720-1: 0P, Ethyl 6-chloropyrrolo[1, -c]pyrimidine-3-carboxylate
     588720-1: 1P, Ethyl 6-bromopyrrolo[1,2 c]pyrimidine-3-carboxylate
     588720-13-2P, Pyrrolo[1,2-c]pyrimidine 3-carboxylic acid hydrochlori le
     588720-14-3P
                    588720-15-4P 588720-1 -5P 588720-29-0P,
     Imidazo[:,5-a]pyridine-7-carboxylic ac d
                                                588720-36-9P, Methyl
     6-(methy!sulfonyloxymethyl)nicotinate
                                             588720-40-5P, Ethyl
     6-(prop-1-ynyl)nicotinate 588720-42- P, Indolizine-6-carboxylic ac d
     588720-4 - 2P, Ethyl 3-ethoxy-0-ethyl-N (1H-pyrrol-2-ylmethylene)-DL-
                588720-48-3P, Pyrrolo[1,2-a pyrazine-3-carboxylic acid
    hvdrochlcride
                    588720-58-5P
                                   588720- 9-6P
                                                  588720-62-1P
                                                                  588720-36-5P.
     Ethyl 3-€thoxy-O-ethyl-N-(1H-imidazol- -ylmethylene)-DL-serinate
     588720-67-6P 588720-68-7P
                                 588720-90- P
    RL: RCT Reactant); SPN (Synthetic pre aration); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of N-(azabicyclyl)aryl mides for therapeutic use as nicotinic
       acetylcholine receptor agonists)
IT
     588720-64-3P 588720-65-4P 588722-40-1P
     588723-74-4P 588724-12-3P 588725-51-3P
     588725-89-7P 588726-79-8P
    RL: PAC Pharmacological activity); SP (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological st dy); PREP (Preparation); USES
     (Uses)
        (preparation of N-(azabicyclyl)aryl mides for therapeutic use as nicotinic
       acetylcholine receptor agonists)
RN
     588720-64-3 CAPLUS
     Imidazo[],2-a]pyrazine-6-carboxamide, -(3R)-1-azabicyclo[2.2.2]oct-3-yl-
CN
     (9CI)
          (CA INDEX NAME)
```

Absolute stere ochemistry.

```
RN 588720-65-4 CAPLUS
CN Imidazo[1,2-a]pyrazine-6-carboxamide, -(3R)-1-azabicyclo[2.2.2]oct-3-yl-,
(2R,3R)-2,3-dihydroxybutanedioate (1:1 (9CI) (CA INDEX NAME)

CM 1

CRN 588720-64-3
CMF C14 H17 N5 O
```

Absolute stereochemistry.

CN 2

CFN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

(H)

RN 583722-40-1 CAPLUS

CN Inidazo[1,2-a]pyrazine-6-carbox mide, N-(1R,3R,4S)-1-azabicyclo[2.2.1]hept-3-/1-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 583723-74-4 CAPLUS

CN Imidazo[1,2-a]pyrazine-6-carbox mide, N-(1R,3R,5R)-1-azabicyclo[3.2.1]oct-3-/1-(9CI) (CA INDEX NAME)

Absolut a stereochemistry.

RN 583724-12-3 CAPLUS

CN Imidazo[1,.-a]pyrazine-6-carboxamide, N- 3R)-1-azabicyclo[3.2.2]non-3-/1-(9CI) (CA INDEX NAME)

Absolute stereoglemistry.

RN 588725-51-3 CAPLUS

CN Imidazo[1,2-a]pyrazine-6-carboxamide, N-.-azabicyclo[2.2.1]hept-5-yl-(9CI) (CA [NDEX NAME)

RN 588725-89- CAPLUS

CN Imidazo[1,2 a]pyrazine-6-carboxamide, N- azabicyclo[2.2.1]hept-6-yl-(9CI) (CA INDEX NAME)

RN 588726-79-8 CAPLUS

CN Imidazo[1,2 a]pyrazine-6-carboxamide, N- 1S,2R,4R)-7-azabicyclo[2.2.1] ept-2-yl- (9CI) (CA INDEX NAME)

Absolute stereognemistry.

IT 588720-67-69 588720-68-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); R.CT (Reactant c: reagent)

(preparation of N-(azabicyclyl)arylam.des for therapeutic use as ni:otinic acetylcholine receptor agonists)

RN 588720-67-€ CAPLUS

CN Imic zo[1,2-a]pyrazine-6-carboxyl c acid, ethyl ester (9CI) (C INDEX NAME

RN 5887 '0-68-7 CAPLUS

CN Imid zo[1,2-a]pyrazine-6-carboxyl c acid, monohydrochloride (9C) (CA INDE : NAME)

HCT

REFERENCE COUNT: THERE A'E 7 CITED REFERENCES AVAILABL: FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN TH: RE FORMAT

L57 ANSW R 14 OF 22 CAPLUS COPYRIGH 2006 ACS on STN

ACCESSION NUMBER: 2003:58094 C. PLUS

DOCUMENT UMBER:

138:106720

TITLE:

Preparation o heteroaryl substituted fused bicyclic

heteroaryl co pounds as benzodiazepine-GABA receptor

ligands and p obes

INVENTOR (;): Hutchison, Al n; Maynard, George; Albaugh, 'amela;

Xie, Linghong Yuan, Jun; Mitchell, Scott; Gingh,

Vinod; Ghosh, Manuka; Li, Guiying; Liu, Nia:

PATENT AS : IGNEE (S): Neurogen Corporation, USA PCT Int. Appl , 141 pp.

SOURCE:

CODEN: PIXXD2

Patent

DOCUMENT YPE: LANGUAGE:

English

FAMILY AC: NUM. COUNT:

PATENT IN 'ORMATION:

| PATE IT NO.    | KIND DA     | ATE         | APPLICATION NO. | D\TE            |
|----------------|-------------|-------------|-----------------|-----------------|
|                |             |             |                 |                 |
| WO 2 03006471  | A1 20       | 00301: 3    | WO 2002-US22130 | 2   020712      |
| i: AE, AG, AI  | , AM, AT, A | AU, A:, BA, | BB, BG, BR, BY, | BZ, CA, CH, CN, |
| CO, CR, CU     | , CZ, DE, D | DK, DI, DZ, | EC, EE, ES, FI, | GB, GD, GE, GH, |
| GM, HR, HU     | , ID, IL, I | IN, I:, JP, | KE, KG, KP, KR, | KZ, LC, LK, LR, |
| LS, LT, LU     | , LV, MA, M | MD, MC, MK, | MN, MW, MX, MZ, | NO, NZ, OM, PH, |
| PL, PT, RO     | , RU, SD, S | SE, SC, SI, | SK, SL, TJ, TM, | TN, TR, TT, TZ, |
| UA, UG, US     | , UZ, VN, Y | YU, Z;, ZM, | ZW              |                 |
| ?W: GH, GM, KE | , LS, MW, M | MZ, SI, SL, | SZ, TZ, UG, ZM, | ZW, AT, BE, BG, |
| CH, CY, CZ     | , DE, DK, E | EE, E:, FI, | FR, GB, GR, IE, | IT, LU, MC, NL, |
| PT, SE, Sk     | , TR, BF, B | BJ, C:, CG, | CI, CM, GA, GN, | GQ, GW, ML, MR, |
| NE, SN, TI     | , TG        |             |                 |                 |

| CA       | 2453554        | AA  | 20030123    | CA 1 )02-2453554        |    | 20020712   |
|----------|----------------|-----|-------------|-------------------------|----|------------|
| US       | 2003207885     | A1  | 20031106    | US : 302-194852         |    | 20020712   |
| US       | 6936617        | B2  | 20050830    |                         |    |            |
| EP       | 1406906        | A1  | 20040414    | EP 2002-749983          |    | 20020712   |
|          | R: AT, F:, CH, | DE, | DK, ES, FR, | GB, GR, IT, LI, LU, NL, | M  | C, PT, IE, |
|          | SI, l', LV,    | FI, | RO, MK, CY, | AL, BG, CZ, EE          |    |            |
| BR       | 2002011124     | Α   | 20040629    | BR 2002-11124           |    | 20020712   |
| CN       | 1553916        | Α   | 20041208    | CN 2002-816696          |    | 20020712   |
| JP       | 2005505518     | T2  | 20050224    | JP 2003-512241          |    | 20020712   |
| NZ       | 530992         | Α   | 20050624    | NZ 2002-530992          |    | 20020712   |
| US       | 2006014746     | Al  | 20060119    | US 2005-214345          |    | 20050829   |
| PRIORITY | APPLN. IN O.:  |     |             | US 2001-305533P         | P  | 20010713   |
|          |                |     |             | US 2002-194852          | А3 | 20020712   |
|          |                |     |             | WO 2002-US22130         | W  | 20020712   |

OTHER SOURCE(S):

MARPAT 138:106720

GΙ

$$\begin{array}{c} X^{2} \\ X^{1} \\ X^{2} \\ X^{2} \\ X^{3} \\ X^{4} \end{array}$$

This inventic relates to heteroaryl substituted fused bicyclic heteroar 1 AB compds., such as heteroaryl-substituted imidazopyridines, imidazopyrazi es, imidazopyridazines, imidazopyrimidines, and imidazothiazc es, which may be described by I or II (variables defined below; e.g. 5 ethyl-6-[[2-(6-fluoro-pyridir.-2-yl)imidazol-1yl]methyl]imi azo[2,1-b]thiazole). The invention particularly relates to such compds. hat bind with high selectivit, and high affinity to the benzodiazepin: site of GABAA receptors. In a assay of GABAA receptor binding that lets. the displacement of 3H-Flumazenyl from rat cortical tissue in 0.0 M Tris HCl buffer at 4°, I or II exhibit Ki of 1-micromolar or less; preferred compds. exhibit Ki of 100 nanomolar or less; and mor: preferred compds. exhibit Ki of 10-nanomolar or less. Th s invention also relates to pharmaceutical compns. comprising such compds. and to the us: of such compds. in treatment of certain central nervous system (CNS) liseases. Processes for preparing I and II are disclosed b t not claimed; 3 example prepns. are included. This invention also relates to the use of benzimidazoles, pyridylimidazoles and related I and II in combination w th ≥1 other CNS agents to potentiate the effects of the other CNS agents. Addnl. this invention relates to the use of such compds. as probes for the localization of GABAA receptors in tissue sections (no lata). For I: Z1 is N or CR1; Z2 is N or CR2; Z3 is N or CR3; Z4 is N or CR4; Z5 is N or C; Z6 is N or C; provided that no more than two of Z -Z6 are N. R1, R2, R3, and R4 = (i) H, halogen, hydroxy, nitro, cyano, amino, haloalkyl, and haloalkxxy; (ii) alkyl, alkoxy, cycloalkyl, a kenyl, alkynyl, (cycloalkyl)alkyl, -NH(R10), -N(R10)(R11), hydroxyalkyl, aminoalkyl, (R10)NHalkyl, (R10)(R11)Nalkyl, alkanoyl,

```
alkoxy arbonyl, alkylsulfonyl, (C1- 6) alkylsulfinyl, alkylthio, m no- and
dialky aminocarbonyl, heterocycloal yl, aryl, and heteroaryl; (ii ) -GRA
(G is alkyl, -O-, -C(O)-, or -CH2-C O)-, and RA is cycloalkyl,
hetero:ycloalkyl, aryl, or heteroar l). (iv) -C(O)JRBRC (J is N, CH, or
C-alky , and RB and RC = H, alkyl, lkenyl, alkynyl, alkoxy, cycl alkyl, (cyclo:lkyl)alkyl, heterocycloalkyl aryl, arylalkyl, alkanoyl,
hetero ryl, and mono and dialkylami balkyl, or RB and RC and the tom to
which hey are attached form a 4- t 10-membered monocyclic or bi yclic
ring, omprising: a) 0-3 double bon s, and (b) 0-3 O, S, SO, SO2, or N-RD
(RD is (1) hydrogen; or (2) Ar1, al yl, cycloalkyl, heterocycloal yl, or
Arlalk 1 (Arl is aryl or heteroaryl ); and (v) -OC(O)RE, -C(O)NH2
-C(O)N RE, -C(O)NRERF, -S(O) nRE, -S O) nNH2, -S(O) nNHRE, -S(O) nNRE F,
-NHC(O RE, -C(:NRE)RF, -HC:N-OH, -H :N(alkoxy), -HC:N(alkyl), -NR C(O)RF, -NHS(O nRE, and -NRES(O)nRF (n is 0 2; RE and RF = alkyl, cycloal yl,
hetero ycloalkyl, alkoxy, mono- and dialkylamino, aryl, and heteroaryl).
R5 = ( ) H, halogen, cyano, or halo lkyl; (ii) alkyl, cycloalkyl,
(cycloalkyl)alkyl, each of which copprises 0-3 double bonds and/o
triple bonds; or (iii) aryl, arylal yl, heteroaryl, or heteroaryl lkyl. Q
= -C(R)(R7), -N(alkyl) - or O (R6 a:d R7 = H, F, or alkyl); with the
proviso that Q is not O when X2 is !; X1 and X2 = N, C or CH; Y io N, C, -CH-, CH2-, or absent; and W = ary or heteroaryl. For II, see he
claims
ICM C 7D513-04
ICS C 17D471-04; C07D487-04; A61K03 -437; A61K031-5025; A61K031-5 9;
     A:1K031-4985; A61P025-00; C07D:13-04; C07D277-00; C07D235-00
     C:7D471-04; C07D235-00; C07D22 -00; C07D487-04; C07D237-00;
     C 7D235-00; C07D487-04; C07D23 -00; C07D235-00
28-17 Heterocyclic Compounds (More Than One Hetero Atom))
Sectio: cross-reference(s): 1, 9
Mental and behavioral disorders
   (at ention deficit hyperactivity disorder; preparation of hete oaryl
   sub:tituted fused bicyclic hetercaryl compds. as benzodiazepin -- GABAA
   receptor ligands and probes with various therapeutic uses)
Mental and behavioral disorders
   (depression; preparation of heterparyl substituted fused bicyc ic heteroaryl
   compds. as benzodiazepine-GABAA eceptor ligands and probes with
   var ous therapeutic uses)
Alzheimer's disease
Anti-A_zheimer's agents
Antidepressants
Antips chotics
Anxiet '
Anxiol tics
Cognit on enhancers
Memory disorders
  Schizophrenia
Sleep disorders
   (preparation of heteroaryl subst tuted fused bicyclic heteroar 1 compds. as
   ben odiazepine-GABAA receptor ligands and probes with various
   the apeutic uses)
488115 60-2P, 6-Chloro-3-propyl-2-[ 2-phenylimidazol-1-
yl)methyl]imidazo[1,2-a]pyridine -88115-61-3P, 6-Chloro-2-[(2-(.-
fluorophenyl)imidazol-1-yl)methyl]iridazo[1,2-a]pyridine
                                                              488115 62-4P,
6-Chlo o-2-[(2-(3-chlorophenyl)imid zol-1-yl)methyl]imidazo[1,2-a pyridine
488115 63-5P, 7-Cyano-3-ethyl-2-[(2 (3-fluorophenyl)imidazol-1-
yl) methyl] imidazo[1,2-a] pyridine
                                   -88115-64-6P, 7-Cyano-3-ethyl-:-[(2-(6-
fluoropyridin-2-yl)imidazol-1-yl)methyl]imidazo[1,2-a]pyridine
488115 65-7P, 3-Ethyl-2-[(2-phenylimidazol-1-yl)methyl]imidazo[1,:-
            488115-66-8P, 3-Ethyl-:-[(2-(3-fluorophenyl)imidazol 1-
a]pyridine
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fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-68-0P, 7 Chloro-3-propyl-2-[(2-(6-fluc opyridin-2-yl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine 488115-69-1P, 6-Chloro-3-propyl-2-[(2-
(6-fluoropyridi -2-yl)imidazol-1-yl)methyl]im.dazo[1,2-a]pyridine
488115-70-4P, 7 Chloro-3-ethyl-2-[(2-(6-fluor)pyridin-2-yl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine 488115-71-5P, 7-Chloro-3-ethyl-2-[(2-(3
fluorophenyl)im dazol-1-yl)methyl]imidazo[1,2 a]pyridine 488115-72-6P,
3-Ethyl-6-fluor -2-[(2-(6-fluoropyridin-2-yl).midazol-1-
yl)methyl]imida o[1,2-a]pyridine 488115-73-'P, 3-Ethyl-6-fluoro-2-[(2-(3
fluorophenyl)im dazol-1-yl)methyl]imidazo[1,2 a]pyridine 488115-74-8P,
3-Ethyl-6-fluor -2-[(2-(3-chlorophenyl)imidaz>l-1-yl)methyl]imidazo[1,2-
            48 115-75-9P, 3-Ethyl-6-fluoro-2 [(2-(2,5-
a]pyridine
difluorophenyl) midazol-1-yl)methyl]imidazo[1 2-a]pyridine
                                                         488115-76-0P,
3-Ethyl-2-[(2-( -cyanophenyl)imidazol-1-yl)me:hyl]imidazo[1,2-a]pyridine
488115-77-1P, 6 Bromo-3-propyl-2-[(2-(3-fluor)phenyl)imidazol-1-
oxadiazol-2-yl) 2-[(2-(3-fluorophenyl)imidazc.-1-yl)methyl]imidazo[1,2-
           48 115-79-3P, 6-Chloro-3-methyl-?-[(2-(6-fluoropyridin-2-
alpyridine
yl)imidazol-1-y )methyl]imidazo[1,2-a]pyridin:
                                             488115-80-6P,
6-Chloro-3-meth 1-2-[(2-(3-fluorophenyl)imida:ol-1-yl)methyl]imidazo[1,2-
           48 115-82-8P, 6-Chloro-3-ethyl-2-[(2-(6-fluoropyridin-2-
yl)imidazol-1-y )methyl]imidazo[1,2-a]pyridin:
                                              488115-83-9P,
6-Chloro-3-ethy -2-[(2-(3-fluoropyridin-2-yl).midazol-1-
yl)methyl]imida o[1,2-a]pyridine 488115-84-)P, 3-Cyano-2-[(2-(6-
fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-85-1P, 3 Cyano-2-[(2-(3-fluoropyridin-:-yl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine
                                 488115-86- P, 3,6-Dimethyl-2-[(2-(6-
fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-87-3P, 3 6-Dimethyl-2-[(2-(3-fluorophe yl)imidazol-1-
fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-89-5P, 7 Ethyl-3-methyl-2-[(2-(3-fluor)phenyl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine
                                 488115-90-3P, 5-Ethyl-3-methyl-2-[(2-(6
fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-91-9P, 5 (1-Hydroxyethyl)-3-methyl-2-[(2-(3-fluorophenyl)imidazol-1
yl)methyl]imida o[1,2-a]pyridine
                                 488115-92-)P, 6-Chloro-3-methyl-2-[(2-
(2,5-difluoroph nyl)imidazol-1-yl)methyl]imid zo[1,2-a]pyridine
488115-93-1P, 6 Chloro-3-methyl-2-[(2-(5-fluo o-2-methylphenyl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine
                                 488115-94-2P, 3,5,7-Trimethyl-2-[(2-(6-
fluoropyridin-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyridine
488115-95-3P, 3 5,7-Trimethyl-2-[(2-(3-fluoro)yridin-2-yl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine
                                488115-96-;P, 3-Methyl-6-
(trifluoromethy)-2-[(2-(6-fluoropyridin-2-yl imidazol-1-
yl)methyl]imida o[1,2-a]pyridine 488115-97-5P, 3-Methyl-6-
(trifluoromethy)-2-[(2-(3-fluorophenyl)imida:ol-1-yl)methyl]imidazo[1,2-
            48 115-98-6P, 3-Bromo-2-[(2-(6-f_uoropyridin-2-yl)imidazol-1-
a]pyridine
                                488115-99-7P, 3-Ethyl-6-
yl)methyl]imida o[1,2-a]pyridine
(trifluoromethy )-2-[(2-(pyrimidin-2-yl)imida:ol-1-yl)methyl]imidazo[1,2-
            48 116-00-3P, 3-Ethyl-6-(trifluo omethyl)-2-[(2-(thiazol-2-
a]pyridine
yl)imidazol-1-y )methyl]imidazo[1,2-a]pyridin:
                                              488116-01-4P,
3,7-Diethyl-2-[ 2-(thiazol-2-yl)imidazol-1-yl methyl]imidazo[1,2-
a]pyridine
            48 116-02-5P, 6-Acetyl-3-ethyl-2 [(2-(thiazol-2-yl)imidazol-1
yl)methyl]imida o[1,2-a]pyridine
                                488116-03-5P, 6-Bromo-3-ethyl-2-[(2-
(thiazol-2-yl)i idazol-1-yl)methyl]imidazo[1, !-a]pyridine
                                                        488116-04-7P,
3-Ethyl-6-(thie -2-yl)-2-[(2-(thiazol-2-yl)im.dazol-1-
2-[(2-(thiazol- -yl)imidazol-1-yl)methyl]imid zo[1,2-a]pyridine
488116-06-9P, 3 Ethyl-6-(pyridin-2-yl)-2-[(2-thiazol-2-yl)imidazol-1-
yl)methyl]imida o[1,2-a]pyridine 488116-07-)P, 3-Ethyl-6-(pyridin-4-yl)-
2-[(2-(thiazol- -yl)imidazol-1-yl)methyl]imid zo[1,2-a]pyridine
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488116-0 -1P, 6-Cyano-3-ethyl-2-[(2-(: iazol-2-yl)imidazol-1-
fluoroph nyl)imidazol-1-yl)methyl]imic zo[1,2-b]pyridazine
                                                             488116 10-5P,
3-Bromo---chloro-2-[(2-(3-fluoropheny] imidazol-1-yl)methyl]imidazo 1,2-b]pyrida ine 488116-11-6P, 6-Chloro 3-propyl-2-[(2-(6-fluoropyrid n-2-
yl)imida ol-1-yl)methyl]imidazo[1,2-b] yridazine
                                                   488116-12-7P,
3-Bromo- -chloro-2-[(2-(6-fluoropyrid: 1-2-yl)imidazol-1-
yl) methy | imidazo[1,2-b] pyridazine
                                    438116-13-8P, 3-Propyl-2-[(2-((-
fluoropy idin-2-yl)imidazol-1-yl)methy: imidazo[1,2-b]pyridazine
488116-1 -9P, 2-[(2-(6-Fluoropyridin-: yl)imidazol-1-yl)methyl]imidazo[1,2-
              488116-15-0P, 3-Bromo-6 chloro-2-[(2-(6-chloropyridi: -2-
b]pyrida ine
yl)imida ol-1-yl)methyl]imidazo[1,2-b] yridazine
                                                   488116-16-1P,
6-Chloro 3-propyl-2-[(2-(6-chloropyricin-2-yl)imidazol-1-
yl)methy ]imidazo[1,2-b]pyridazine 438116-17-2P, 6-Chloro-3-propyl-2-[(2-
(3-cyano: henyl) imidazol-1-yl) methyl] in idazo[1,2-b] pyridazine
488116-1 -3P, 6-Chloro-3-ethyl-2-[(2-:5-chloropyridin-2-yl)imidazol 1-
yl) methy | imidazo[1,2-b] pyridazine
                                    438116-19-4P, 3-Propyl-2-[(2-(jyridin-
2-yl)imicazol-1-yl)methyl]imidazo[1,2-3]pyridazine
                                                      488116-20-7P,
6-Chloro 3-methyl-2-[(2-(6-fluoropyridin-2-yl)imidazol-1-
yl)methy ]imidazo[1,2-b]pyridazine
                                    438116-21-8P, 6-Chloro-3-methy]-2-[(2-
(4-chlor pyridin-2-yl)imidazol-1-yl)m€:hyl]imidazo[1,2-b]pyridazine
488116-2 -9P, 6-Chloro-3-methyl-2-[(2-(6-chloropyridin-2-yl)imidazo]-1-
                                     438116-23-0P, 3-Methyl-2-[(2-(t-
yl)methy | imidazo[1,2-b]pyridazine
fluoropy idin-2-yl)imidazol-1-yl)methyi]imidazo[1,2-b]pyridazine
488116-2 -1P, 6-Chloro-3-ethyl-2-[(2-+1-chloropyridin-2-yl)imidazol 1-
yl) methy ] imidazo[1,2-b] pyridazine
                                    4 38116-25-2P, 3-Ethyl-2-[(2-(6-
fluoropy idin-2-yl)imidazol-1-yl)methyl]imidazo[1,2-b]pyridazine
488116-2-3P, 3-Methyl-2-[(2-(pyridin-?-yl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-27-4P, 3-Ethyl-2-[(2-(p)ridin-
2-yl)imi azol-1-yl)methyl]imidazo[1,2-p]pyridazine
                                                      488116-28-5P,
6-Chloro 3-ethyl-2-[(2-(3-cyanophenyl):midazol-1-yl)methyl]imidazo[1,2-
b]pyrida ine
               488116-29-6P, 3-Propyl-?-[(2-(3-cyanophenyl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine 438116-30-9P, 6-Chloro-3-propy:-2-[(2-
(2-fluor phenyl)imidazol-1-yl)methyl]imidazo[1,2-b]pyridazine
488116-3 -0P, 6-Chloro-3-ethyl-2-[(2-+3-fluorophenyl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                    438116-32-1P, 6-Chloro-3-propy:-2-[(2-
(2-cyano; henyl) imidazol-1-yl) methyl] in .dazo[1,2-b] pyridazine
488116-3 -2P, 6-Chloro-3-propyl-2-[(2-(2-fluoropyridin-4-yl)imidazo]-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-34-3P, 6-Chloro-3-propy: -2-[(2-
(2-chlor pyridin-3-yl)imidazol-1-yl)meihyl]imidazo[1,2-b]pyridazine
488116-3 -4P, 3-Propyl-2-[(2-(pyridin-3-yl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-36-5P, 6-Chloro-3-ethyl-2-[(2-
(2-fluor phenyl) imidazol-1-yl) methyl] i aidazo[1,2-b] pyridazine
488116-3 -6P, 6-Chloro-3-propyl-2-[(2-(3-fluoropyridin-2-yl)imidazo]-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-38-7P, 6-Chloro-3-propy]-2-[(2-
(2-(trif uoromethyl)phenyl)imidazol-1-/l)methyl]imidazo[1,2-b]pyridazine
488116-3.-8P, 6-Chloro-3-propyl-2-[(2-(2-chlorophenyl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-40-1P, 6-Chloro-3-methyl-2-[(2-
(2-(trif uoromethyl)phenyl)imidazol-1-/l)methyl]imidazo[1,2-b]pyridazine
488116-4 -2P, 6-Chloro-3-propyl-2-[(2-(3-(methylsulfonyl)phenyl)imicazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                     438116-42-3P, 6-Chloro-3-propy]-2-[(2-
(5-(trif uoromethyl)pyridin-2-yl)imidazol-1-yl)methyl]imidazo[1,2-
               488116-43-4P, 6-Chloro-}-propyl-2-[(2-(2-piperidinopyridin-
b]pyrida: ine
3-yl)imicazol-1-yl)methyl]imidazo[1,2-5]pyridazine
                                                     488116-44-5P,
6-Chloro 3-propyl-2-[(2-(6-(trifluorom ethyl)pyridin-2-yl)imidazol-1
yl)methy | imidazo[1,2-b]pyridazine
                                    438116-45-6P, 6-Chloro-3-propy]-2-[(2-
(6-cyano; yridin-2-yl) imidazol-1-yl) met iyl] imidazo[1,2-b] pyridazine
488116-4: -7P, 6-Chloro-3-propyl-2-[(2-(pyrazin-2-yl)imidazol-1-
yl)methy | imidazo[1,2-b]pyridazine
                                    4 38116-47-8P, 6-Chloro-3-propy]-2-[(2-
(5-fluor pyridin-3-yl)imidazol-1-yl)methyl]imidazo[1,2-b]pyridazine
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488116-48-9P, 6-C loro-3-propyl-2-[(2-(3-(trifl oromethyl)phenyl)imidazol-
1-yl)methyl]imida ɔ[1,2-b]pyridazine 488116-4 -0P, 6-Chloro-3-propyl-2-
[(2-(1,5-dimethyl: /razol-3-yl)imidazol-1-yl)met yl]imidazo[1,2-
               48 116-50-3P, 6-Chloro-3-propyl- -[(2-(4-chloro-1-
b]pyridazine
methylpyrazol-3-y )imidazol-1-yl)methyl]imidazo 1,2-b]pyridazine
488116-51-4P, 6-C loro-3-propyl-2-[(2-(4-cyanop ridin-2-yl)imidazol-1-
yl)methyl]imidazo 1,2-b]pyridazine
                                     488116-52- P, 6-Chloro-3-propyl-2-[(2-
(2,6-difluorophen l)imidazol-1-yl)methyl]imidaz [1,2-b]pyridazine
488116-53-6P, 6-C: loro-3-propyl-2-[(2-(pyrimidi -2-yl)imidazol-1-
yl) methyl] imidazo 1,2-b] pyridazine
                                     488116-54- P, 6-Chloro-3-methyl-2-[(2-
(1,6-dihydro-6-ox oyridin-2-yl)imidazol-1-yl)me hyl]imidazo[1,2-
               48: 116-55-8P, 6-Chloro-3-methyl-.-[(2-(pyrimidin-2-
b]pyridazine
yl)imidazol-1-yl)rethyl]imidazo[1,2-b]pyridazine
                                                   488116-56-9P,
6-Chloro-3-propyl 2-[(2-(5-fluoro-2-methylpheny )imidazol-1-
yl)methyl]imidazo 1,2-b]pyridazine
                                     488116-57- P, 6-Chloro-2-[(2-(6-
fluoropyridin-2-y )imidazol-1-yl)methyl]imidazo 1,2-b]pyridazine
488116-58-1P, 3,6 Dichloro-2-[(2-(6-fluoropyrid n-2-yl)imidazol-1-
yl)methyl]imidazo 1,2-b]pyridazine
                                     488116-59-. P,
3,6-Dimethyl-2-[(:-(6-fluoropyridin-2-yl)imidaz..l-1-yl)methyl]imidazo[1,2-
               48: 116-60-5P, 3,6-Dimethyl-2-[(2 (6-cyanopyridin-2-
b]pyridazine
yl)imidazol-1-yl): ethyl]imidazo[1,2-b]pyridazin: 488116-61-6P,
3,6-Dimethyl-2-[(:-(3-fluoropyridin-2-yl)imidaz-l-1-yl)methyl]imidazo[1,2-
              48:116-62-7P, 6-Chloro-3-methyl-.-[(2-(thien-2-yl)imidazol-
b]pyridazine
1-yl)methyl]imida: o[1,2-b]pyridazine
                                      488116-6 -8P, 6-Chloro-3-ethyl-2-
[(2-(3-fluoropyricin-2-yl)imidazol-1-yl)methyl] midazo[1,2-b]pyridazine
488116-64-9P, 3-E:nyl-2-[(2-(3-fluoropyridin-2- l)imidazol-1-
yl)methyl]imidazo 1,2-b]pyridazine
                                   488116-65- P, 6-(Dimethylamino)-3-
ethyl-2-[(2-(6-ch propyridin-2-yl)imidazol-1-yl methyl]imidazo[1,2-
               488 116-66-1P, 3-Ethyl-6-(methyla::ino)-2-[(2-(6-
b]pyridazine
chloropyridin-2-y )imidazol-1-yl)methyl]imidazo 1,2-b]pyridazine
488116-67-2P, 6-Cloro-3-ethyl-2-[(2-(pyrimidin 2-yl)imidazol-1-
yl)methyl]imidazo 1,2-b]pyridazine
                                    488116-68- P, 3-Ethyl-6-methoxy-2-[(2-
(3-fluoropyridin-: -yl)imidazol-1-yl)methyl]imid.zo[1,2-b]pyridazine
488116-69-4P, 3-C: loro-7-methoxy-2-[(2-(6-fluoropyridin-2-yl)imidazol-1-
yl)methyl]imidazo 1,2-c]pyrimidine 488116-70- P, 3-Chloro-7-methoxy-2-
[(2-(2,5-difluoro; nenyl)imidazol-1-yl)methyl]im dazo[1,2-c]pyrimidine
488116-71-8P, 3-Clloro-7-methoxy-2-[(2-(3-fluor phenyl)imidazol-1-
yl)methyl]imidazo 1,2-c]pyrimidine 488116-72-9P
3-Chloro-2-[(2-(6 fluoropyridin-2-yl)imidazol-1 yl)methyl]imidazo[1,2-
a]pyrazine 488116-73-0P, 3-Bromo-2-[(2-(6-fluoropyridin-2-
yl)imidazol-1-yl)rethyl]imidazo[1,2-a]pyrazine 488116-74-1P,
3-Bromo-2-[(2-(3-:luoropyridin-2-yl)imidazol-1-·1)methyl]imidazo[1,2-
a]pyrazine 488116-75-2P, 6-Bromo-3-chloro-2-[(2 (6-fluoropyridin-
2-yl)imidazol-1-yl)methyl]imidazo[1,2-a]pyrazine 488116-76-3P,
3-Chloro-6-methyl 2-[(2-(6-fluoropyridin-2-yl)inidazol-1-
yl) methyl] imidazo 1,2-a] pyrazine 488116-78-5P,
3-Chloro-6-methoxy-2-[(2-(6-fluoropyridin-2-yl) midazol-1-
yl)methyl]imidazo 1,2-a]pyrazine 488116-79-6P,
3-Chloro-6-methox; -2-[(2-(6-methoxypyridin-2-yl imidazol-1-
yl) methyl] imidazo 1,2-a] pyrazine 488116-80-9P,
3-Chloro-6-(pyrrolidino)-2-[(2-(6-pyrrolidinopy.idin-2-yl)imidazol-1-
yl)methyl]imidazo 1,2-a]pyrazine 488116-81-0P,
3,6-Dimethyl-2-[(?-(6-fluoropyridin-2-yl)imidazol-1-yl)methyl]imidazo[1,2-
a]pyrazine 488116-82-1P, 6-Bromo-3-chloro-2-[(2 (thiazol-2-
yl)imidazol-1-yl)rethyl]imidazo[1,2-a]pyrazine 488116-83-2P,
3-Bromo-2-[(2-(6-rethoxypyridin-2-yl)imidazol-1 yl)methyl]imidazo[1,2-
a]pyrazine 488116-84-3P, 3-Chloro-6-methyl-2-[(:-(3-
fluorophenyl)imidazo[1,2-a pyrazine
                                                           488116-85-4P,
3-Propyl-2-[(2-(6 fluoropyridin-2-yl)imidazol-1 yl)methyl]imidazo[1,2-
              48{116-86-5P, 3-Propyl-2-[(2-(3-(yanophenyl)imidazol-1-
a]pyrimidine
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yl)methyl] midazo[1,2-a]pyrimidine
                                      488 .16-87-6P, 3-Bromo-2-[(2-(6-
fluoropyri in-2-yl)imidazol-1-yl)methyl] midazo[1,2-a]pyrimidine
488116-88- P, 3-Ethyl-2-[(2-(6-fluoropy: din-2-yl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                      488 16-89-8P, 3-Ethyl-2-[(2-(3-
fluorophen 1) imidazol-1-yl) methyl] imidaz > [1,2-a] pyrimidine
                                                              488116-9 -1P,
3-Ethyl-2- (2-(3-cyanophenyl)imidazol-1- 1)methyl]imidazo[1,2-a]pyrim line
488116-91- P, 3-Ethyl-2-[(2-(6-chloropyr din-2-yl)imidazol-1-
yl) methyl] midazo[1,2-a] pyrimidine
                                     488 16-92-3P, 3-Ethyl-2-[(2-(3-
chlorophen l)imidazol-1-yl)methyl]imidaz > [1,2-a]pyrimidine
                                                              488116-9'-4P,
3-Ethyl-2- (2-(2-(trifluoromethyl)phenyl imidazol-1-yl)methyl]imidazo 1,2-
a]pyrimidi e
               488116-94-5P, 3-Ethyl-2-{ 2-(2-chlorophenyl)imidazol-1
yl)methyl] midazo[1,2-a]pyrimidine
                                    488 16-95-6P, 3-Ethyl-2-[(2-(2-
fluorophen l)imidazol-1-yl)methyl]imidaz [1,2-a]pyrimidine
                                                              488116-9: -7P,
3-Ethyl-2- (2-(3-fluoropyridin-2-yl)imid zol-1-yl)methyl]imidazo[1,2-
a]pyrimidi e
               488116-97-8P, 3-Ethyl-2-(2-fluoropyridin-4-yl)imid:zol-
1-yl)methy | imidazo[1,2-a]pyrimidine 4 | 8116-98-9P, 3-Ethyl-2-[(2-(6
cyanopyrid n-2-yl)imidazol-1-yl)methyl]i iidazo[1,2-a]pyrimidine
488116-99- P, 3-Ethyl-2-[(2-(5-(trifluor)methyl)pyridin-2-yl)imidazol 1-
yl)methyl] midazo[1,2-a]pyrimidine
                                     488_17-00-6P, 3-Bromo-2-[(2-(3-
fluorophen l)imidazol-1-yl)methyl]imidaz >[1,2-a]pyrimidine
                                                              488117-0'-7P,
3-Bromo-2- (2-(6-(trifluoromethyl)pyridi 1-2-yl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                    488.17-02-8P, 3-Bromo-2-[(2-(1,5
dimethylpy azol-3-yl)imidazol-1-yl)methy ]imidazo[1,2-a]pyrimidine
488117-03- P, 3-Bromo-2-[(2-(3-(trifluor)methyl)phenyl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                      488 17-04-0P, 3-Bromo-2-[(2-(4-
methoxyphe: yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyrimidine
488117-05- P, 3-Bromo-2-[(2-(3-fluoro-5- trifluoromethyl)phenyl)imida: ol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                    488 17-06-2P, 3-Bromo-2-[(2-(3,5
difluoroph nyl)imidazol-1-yl)methyl]imid (zo[1,2-a]pyrimidine
488117-07- P, 3-Bromo-2-[(2-(2-methylthi zol-4-yl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                     488 .17-09-5P,
3-Methyl-2 [(2-(3-fluorophenyl)imidazol-.-yl)methyl]imidazo[1,2-
               488117-10-8P, 3-Methyl-2- (2-(6-cyanopyridin-2-yl)imidazol-
a]pyrimidi:e
1-yl)methy | imidazo[1,2-a]pyrimidine 4 38117-11-9P, 3-Bromo-2-[(2-(6
cyanopyrid n-2-yl)imidazol-1-yl)methyl]i iidazo[1,2-a]pyrimidine
488117-12-P, 3-Methyl-2-[(2-(6-fluoropy idin-2-yl)imidazol-1-yl)methyl] midazo[1,2-a]pyrimidine 488 17-13-1P, 3-Ethyl-2-[(2-(6-
(trifluororethyl)pyridin-2-yl)imidazol-1 yl)methyl]imidazo[1,2-
               488117-14-2P, 3-Ethyl-2-[2-(5-methylisoxazol-3-yl)imicazol-
a]pyrimidi:e
1-yl) methy | imidazo[1,2-a] pyrimidine
                                        4 38117-15-3P, 3-Ethyl-2-[(2-
(thiazol-2 yl)imidazol-1-yl)methyl]imida:o[1,2-a]pyrimidine
488117-16--P, 3-Ethyl-2-[(2-(2,3-difluor)phenyl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                      488.17-17-5P, 3-Ethyl-2-[(2-(3,4
difluorophenyl)imidazol-1-yl)methyl]imid zo[1,2-a]pyrimidine
488117-18-(P, 3-Ethyl-7-methyl-2-[(2-(6- luoropyridin-2-yl)imidazol-1
                                      488 17-19-7P, 3-Ethyl-2-[(2-(5-fluoro-
yl)methyl].midazo[1,2-a]pyrimidine
2-methylphenyl)imidazol-1-yl)methyl]imid zo[1,2-a]pyrimidine
488117-20-(P, 3-Ethyl-7-(trifluoromethyl -2-[(2-(3-chloro-2,5-
difluoroph nyl)imidazol-1-yl)methyl]imid zo[1,2-a]pyrimidine
488117-21-1P, 3-Ethyl-2-[(2-(2,5-difluor)phenyl)imidazol-1-
yl)methyl] midazo[1,2-a]pyrimidine
                                     488 17-22-2P, 3-Ethyl-2-[(2-(3-c] loro-
2,5-difluo: ophenyl) imidazol-1-yl) methyl] .midazo[1,2-a] pyrimidine
488117-23-: P, 3-Ethyl-2-[(2-(5-cyano-2-f uorophenyl)imidazol-1-
yl) methyl] midazo[1,2-a] pyrimidine
                                      488.17-24-4P, 5-Methyl-3-propyl-1-[(2-
(3-fluorop!enyl)imidazol-1-yl)methyl]pyr zolo[1,5-a]pyrimidine
488117-25- P, 5-Methyl-3-propyl-2-[(2-(2 fluorophenyl)imidazol-1-
yl)methyl];yrazolo[1,5-a]pyrimidine
                                      48 117-26-6P, 5-Methyl-3-propyl-2-
[(2-(4-fluorophenyl)imidazol-1-yl)methyl pyrazolo[1,5-a]pyrimidine
488117-27-'P, 5-Methyl-3-propyl-2-[(2-(2 5-difluorophenyl)imidazol-1-
yl)methyl];yrazolo[1,5-a]pyrimidine
                                      483117-28-8P, 5-Methyl-3-propyl-2-
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[(2-(3-chloro-4-flu cophenyl)imidazol-1-yl)methyl pyrazolo[1,5-
  a]pyrimidine
                4881 7-29-9P, 5-Methyl-3-propyl-2- (2-(3-
  chlorophenyl)imidaz (1-1-yl)methyl]pyrazolo[1,5-a] yrimidine
  488117-30-2P, 5-Met: /l-3-propyl-2-[(2-(3-fluoroph nyl)-4-methylimidazol-1-
  yl)methyl]pyrazolo[ ,5-a]pyrimidine
                                       488117-31-3', 5-Methyl-3-propyl-2-
  [(2-(2,5-difluoroph: 1yl)-4-methylimidazol-1-yl)me hyl]pyrazolo[1,5-
  a]pyrimidine
                4881 7-32-4P, 3-Ethyl-7-methoxy-5-:ethyl-2-[(2-(3-
  fluorophenyl) imidaz (1-1-yl) methyl] pyrazolo [1,5-a] yrimidine
  488117-33-5P, 3-Eth 1-7-methoxy-5-methyl-2-[(2-(3 chlorophenyl)imidazol-1-
                                       488117-34-6 , 3-Ethyl-7-methoxy-5-
  yl)methyl]pyrazolo[ ,5-a]pyrimidine
  methyl-2-[(2-(2,5-d fluorophenyl)imidazol-1-yl)me hyl]pyrazolo[1,5-
  a]pyrimidine
                4881 7-35-7P, 3-Ethyl-5-methyl-2-[ 2-(6-fluoropyridin-2-
  yl)imidazol-1-yl)me: nyl]pyrazolo[1,5-a]pyrimidine
                                                     488117-36-8P,
  3-Ethyl-6-(3-hydrox -3-methylbutyl)-2-[(2-(thiaze -2-yl)imidazol-1-
  yl)methyl]imidazo[1 2-a]pyridine 488117-37-9P, -Ethyl-6-(3-hydroxy-3-
  methyl-1-butenyl)-2 [(2-(thiazol-2-yl)imidazol-1- l)methyl]imidazo[1,2-
              488117 38-OP, 3-Ethyl-6-(thiazol-2-y)-2-[(2-(pyrimidin-2-
  a]pyridine
  yl) imidazol-1-yl) met nyl] imidazo[1,2-a] pyridine
                                                 88117-39-1P,
  3-Ethyl-6-(pyridin-:-yl)-2-[(2-(pyrimidin-2-yl)im dazol-1-
 yl)methyl]imidazo[1 2-a]pyridine 488117-40-4P,
                                                   -Acetyl-3-ethyl-2-[(2-
  (pyrimidin-2-yl)imic azol-1-yl)methyl]imidazo[1,2-,]pyridine
  488117-41-5P, 6-Chlcro-3-ethyl-2-[(2-(pyrimidin-2 yl)imidazol-1-
  yl)methyl]imidazo[1 2-a]pyridine
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  methoxypropyl)-2-[(: -(pyrimidin-2-yl)imidazol-1-y )methyl]imidazo[1,2-
              1-yl)methyl]imidazo 1,2-a]pyridine 488117-44-8P 6-Bromo-3-ethyl-2-[(2-
  (pyrimidin-2-yl)imic azol-1-yl)methyl]imidazo[1,2-.]pyridine
  488117-45-9P, 3-Ethyl-6-fluoro-2-[(2-(thiazol-2-y )imidazol-1-
  yl)methyl]imidazo[1 2-a]pyridine
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                                                   -Ethyl-6-(2-
  methylphenyl)-2-[(2 (pyrimidin-2-yl)imidazol-1-yl methyl]imidazo[1,2-
              488117 47-1P, 3-Ethyl-6-(2-methoxyph\cdotnyl)-2-[(2-(pyrimidin-2-
  yl) imidazol-1-yl) met nyl] imidazo[1,2-a] pyridine
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  3-Ethyl-6-(2-(trifly promethyl) phenyl) -2-[(2-(pyri idin-2-yl) imidazol-1-
 yl)methyl]imidazo[1,2-a]pyridine 488117-49-3P,
                                                   -Ethyl-6-(3-hydroxy-3-
  methylbutyl)-2-[(2- thiazol-2-yl)imidazol-1-yl)me hyl]imidazo[1,2-
 b]pyridazine
                488117-50-6P, 6-Acetyl-3-ethyl-2-[ 2-(pyrimidin-2-
  yl)imidazol-1-yl)met nyl]imidazo[1,2-b]pyridazine
                                                    488117-51-7P,
  3-Ethyl-2-[(2-(pyrir idin-2-yl)imidazol-1-yl)methy ]imidazo[1,2-
 b]pyridazine
                4881: 7-52-8P, 3-Ethyl-6-(thiazol-2 yl)-2-[(2-(pyrimidin-2-
 yl)imidazol-1-yl)met nyl]imidazo[1,2-b]pyridazine
                                                    488117-53-9P,
  3-Ethyl-6-(trifluorc methyl)-2-[(2-(pyrimidin-2-yl imidazol-1-
 yl)methyl]imidazo[1,2-b]pyridazine 488117-54-0P 3-Ethyl-6-(2-
  isopropoxyethoxy) -2 [(2-(pyrimidin-2-yl)imidazol- -yl)methyl]imidazo[1,2-
 b]pyridazine
                4881 7-55-1P, 3-Ethyl-6-((tetrahyd opyran-4-yl)oxy)-2-[(2-
  (pyrimidin-2-yl)imic azol-1-yl)methyl]imidazo[1,2-..]pyridazine
488117-56-2P, 6-(4-Chloro-2-methylphenoxy)-3-ethyl---[(2-(pyrimidin-2-
 yl)imidazol-1-yl)met nyl]imidazo[1,2-b]pyridazine
                                                   488117-57-3P,
  3-Ethyl-6-((4-(triflaoromethyl)phenyl)methoxy)-2- (2-(pyrimidin-2-
 yl)imidazol-1-yl)met nyl]imidazo[1,2-b]pyridazine
                                                    488117-58-4P,
  3-Ethyl-6-((tetrahycrofuran-3-yl)oxy)-2-[(2-(pyrimidin-2-yl)imidazol-1-
 yl)methyl]imidazo[1,2-b]pyridazine 488117-59-5P 3-Ethyl-6-(4-
  (trifluoromethoxy)p} enoxy)-2-[(2-(pyrimidin-2-yl) midazol-1-
 yl)methyl]imidazo[1,2-b]pyridazine
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PAC
  (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic
 use); ANST (Analytical study); BIOL (Biological study); PREP
  (Preparation); USES (Uses)
     (drug candidate, receptor probe; preparation o heteroaryl substituted fused
    bicyclic heteroa: /l compds. as benzodiazepine- ABAA receptor ligands
    and probes)
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IT 488116-72-9P. 3-Chloro-2-[(2-(6-fluoropyri lin-2-yl)imidazol-1yl)methyl]im.dazo[1,2-a]pyrazine 488116-73 OP, 3-Bromo-2-[(:-(6-fluoropyridin-2-yl)imidaz,l-1-yl)methyl]imidazo[1,2a)pyrazine 4:8116-74-1P, 3-Bromo-2-[(2-(3- luoropyridin-2yl)imidazol- -yl)methyl]imidazo[1,2-a]pyra:ine 488116-75-2P, 6-Bromo-3-ch.oro-2-[(2-(6-fluoropyridin-2-1)imidazol-1yl) methyl] im dazo[1,2-a] pyrazine 488116-76 3P, 3-Chloro-6-methyl-2-{(2-(6-fluoropyridin-2 yl)imidazol-1yl) methyl] im: dazo[1,2-a] pyrazine 488116-78-5P, 3-Chloro-6-methoxy-2-[(2-(6-fluoropyridin- -yl)imidazol-1yl) methyl] im: dazo[1,2-a] pyrazine 488116-79 -6P, 3-Chloro-6-methoxy-2-[(2-(6-methoxypyridin 2-yl)imidazol-1yl) methyl] im: dazo[1,2-a] pyrazine 488116-80 9P, 3-Chloro-6-(ryrrolidino)-2-[(2-(6-pyrrolid nopyridin-2-yl)imidazol-1yl) methyl] im: dazo[1,2-a] pyrazine 488116-81 · OP, 3,6-Dimethyl 2-[(2-(6-fluoropyridin-2-yl)inidazol-1-yl)methyl]imidazo[1,2a]pyrazine 488116-82-1P, 6-Bromo-3-chloro-:-[(2-(thiazol-2yl)imidazol-1-yl)methyl]imidazo[1,2-a]pyra:ine 488116-83-2P, 3-Bromo-2-[([-(6-methoxypyridin-2-yl)imida:ol-1-yl)methyl]imidazo[1,2a]pyrazine 488116-84-3P, 3-Chloro-6-methyl 2-[(2-(3fluorophenyl; imidazol-1-yl) methyl] imidazo[,,2-a] pyrazine RL: ARG (Analytical reagent use); BUU (Bio ogical use, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); ANST (/nalytical study); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug cancidate, receptor probe; preparation of heteroaryl substituted fused bicyclic leteroaryl compds. as benzodia:epine-GABAA receptor ligands and probe:) 488116-72-9 CAPLUS RNImidazo[1,2-a]pyrazine, 3-chloro-2-[[2-(6-'luoro-2-pyridinyl)-1H-imidazcl-CN 1-yl]methyl] (9CI) (CA INDEX NAME)

RN 488116-73-0 CAPLUS CN Imidazo[1,2-&]pyrazine, 3-bromo-2-[[2-(6-f.uoro-2-pyridinyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

RN 488116-74-1 CAPLUS CN Imidazo[1,2-a]pyrazine, 3-bromo-2-[[2-(3-f.uoro-2-pyridinyl)-1H-imidazol-1yl]methyl] - (9CI) (CF INDEX NAME)

RN 488116-75-2 CAPLUS

CN Imidazo[1,2-a]pyrazine. 6-bromo-3-chloro-2-[[2-(6-f uoro-2-pyridinyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

RN 488116-76-3 CAPLUS

CN Imidazo[1,2-a]pyrazine. 3-chloro-2-[[2-(6-fluoro-2-yridinyl)-1H-imidazol-1-yl]methyl]-6-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 488116-78-5 CAPLUS

CN Imidazo[1,2-a]pyrazine. 3-chloro-2-[[2-(6-fluoro-2-; yridinyl)-1H-imidazol-1-yl]methyl]-6-methoxy· (9CI) (CA INDEX NAME)

RN 488116-79-6 CAPLUS

CN Imidazo[1,2-a]pyrazine 3-chloro-6-methoxy-2-[[2-(6 methoxy-2-pyridinyl)-

1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX N.ME)

RN 488116-80-9 CFPLUS

CN Imidazo[1,2-a]r/razine, 3-chloro-6-(1-pyrrol dinyl)-2-[[2-[6-(1-pyrrolidinyl)-1-pyridinyl]-1H-imidazol-1-yl]rethyl]- (9CI) (CA INDEX NAME)

RN 488116-81-0 C/ PLUS

CN Imidazo[1,2-a]; /razine, 2-[[2-(6-fluoro-2-py:idinyl)-1H-imidazol-1-yl]methyl]-3,6-limethyl- (9CI) (CA INDEX NAME)

Me 
$$CH_2 - N$$

RN 488116-82-1 CFPLUS

CN Imidazo[1,2-a]r/razine, 6-bromo-3-chloro-2-[2-(2-thiazolyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

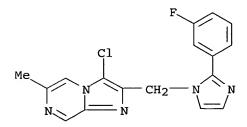
RN 488116-83-2 CF PLUS

CN Imidazo[1,2-a]r/razine, 3-bromo-2-[[2-(6-met)oxy-2-pyridinyl)-1H-imidazol-

## 1-yl]methyl] - (9CI) (CF INDEX NAME)

RN 488116-84-3 CAPLUS

CN Imidazo[1,2-a]pyrazine, 3-chloro-2-[[2-(3-fluoropheny )-1H-imidazol-1-yl]methyl]-6-methyl- (9Cl) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCE AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAIL BLE IN THE RE FORMAT

L57 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003.42275 CAPLUS

DOCUMENT NUMBER: 138:.06717

TITLE: Preparation of β-amino tetrahydro midazo[1,2-

alpy azines and tetrahydrotrioazo o[4,3-a]pyrazines as dipestidyl peptidase inhibitors f r the treatment or

prevention of diabetes

INVENTOR(S): Edmc dson, Scott D.; Fisher, Mich el H.; Kim, Dooseop;

MacCoss, Malcolm; Parmee, Emma R. Weber, Ann E.; Xu,

Jiny ɔu

PATENT ASSIGNEE(S): Merc: & Co., Inc., USA

SOURCE: PCT Int. Appl., 69 pp.

CODE 1: PIXXD2

DOCUMENT TYPE: Pate it LANGUAGE: Engl.sh

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND DATE      | APPLICATION NO        | DATE               |
|---------------|----------------|-----------------------|--------------------|
|               |                |                       |                    |
| WO 2003004498 | A1 2003        | 0116 WO 2002-US2134   | 20020705           |
| W: AE, AG, A  | L, AM, \T, AU, | AZ, BA, BB, BG, BR, B | , BZ, CA, CH, CN,  |
| CO, CR, C     | U, CZ, DE, DK, | DM, DZ, EC, EE, ES, F | , GB, GD, GE, GH,  |
| GM, HR, 1     | U, ID, IL, IN, | IS, JP, KE, KG, KR, K | ., LC, LK, LR, LS, |
| LT, LU,       | V, MA, 1D, MG, | MK, MN, MW, MX, MZ, N | , NZ, OM, PH, PL,  |
| PT, RO,       | U, SD, BE, SG, | SI, SK, SL, TJ, TM, T | TR, TT, TZ, UA,    |
| UG, US, 1     | Z, VN, (U, ZA, | ZM, ZW                |                    |
| RW: GH, GM,   | E, LS, 1W, MZ, | SD, SL, SZ, TZ, UG, Z | !, ZW, AT, BE, BG, |
| CH, CY,       | Z, DE, )K, EE, | ES, FI, FR, GB, GR, I | ., IT, LU, MC, NL, |

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PT, SE, SC, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
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                                 20040629
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                                             NZ 2002 529833
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     ZA 2003009294
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                                 20040722
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                                                                     20031128
                                             US 2003 481353
     US 2004167133
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                                 20040826
                                                                     20031219
     BG 108493
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                                             BG 2003 108493
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                                                                     20031222
PRIORITY APPLN. INFO.:
                                             US 2001 303474P
                                                                  P 20010706
                                             EP 2002 749813
                                                                  A3 20020705
                                             WO 2002 US21349
                                                                  W 20020705
                         MARPAT 138:106717
OTHER SOURCE(S):
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GI

AB β-Amino tetrahydroimidazo[1,2-a]pyrazines and tetrahydrotrioazolo[4,3-a]pyrazines [e.g. I; wherein Ar = (substitutec) phenyl; X = N, CR2; R1, R2, independently = H, CN, (branched) (substituted) (C1-C10)alkyl, (substituted) Ph, (saturated) 5- or 6-membered heterocycle, etc.] were prepared For example, 7-[(3R)-3-amino-4-(3,4-difluorophenyl)butanoyl]-2- (trifluoromethyl) 5,6,7,8-tetrahydroimidazo[1,2-a]pyrazine (II) was prepared in several steps. The prepared compds. are inhibitors of the dipeptidyl peptidase-IV enzyme ("DP-IV inhibitors") and, thus, are useful in the treatment or prevention of diseases in which the dipeptidyl peptidase-IV

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enzyme is involved, such a type 2 diabetes (no data).
I
    ICM C07D487-04
     ICS A61K031-4985; A61P003 10
    28-17 (Heterocyclic Compou :ds (More Than One Hetero Ato: 1)
C
    Section cross-reference(s) 1, 63
Ιr
    Nerve, disease
        (neuropathy, therapeuti agents; preparation of \beta-am no
        tetrahydroimidazo[1,2-a pyrazines and tetrahydrotrio zolo[4,3-
        a]pyrazines as dipeptid l peptidase inhibitors)
     274-79-3P, Imidazo[1,2-a]p razine 91476-80-1P,
I
     5,6,7,8-Tetrahydroimidazo[ ,2-a]pyrazine 109113-96-4P
                   140910-77-6
                                   486459-98-7P
     126069-70-3P
                                                  486459-99-, 2
                                                                 486460-00-8P
                    486460-02-0
     486460-01-9P
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                   486460-07-5
                                                  486460-09-1P
     486460-06-4P
                                   486460-08-6P
                                                                 486460-10-0P
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     486460-11-1P
                                   486460-13-3P
                                                  486460-14-4-P
                                                                 486460-15-5P
     486460-16-6P
                   486460-17-7;
                                   486460-18-8P
                                                 486460-19- ?
                                                                 486460-20-2P
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                                   486460-23-5P 486460-24-1P
     486460-21-3P
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     486460-26-8P
    RL: RCT (Reactant); SPN (S inthetic preparation); PREP (; reparation); RACT
     (Reactant or reagent)
        (preparation of \beta-amino tetrahydroimidazo[1,2-a]pyra: ines and
        tetrahydrotrioazolo[4,3 a]pyrazines as dipeptidyl pe; tidase inhibitors)
     274-79-3P, Imidazo[1,2-a]p razine 109113-96-4P
I'.
     RL: RCT (Reactant); SPN (S inthetic preparation); PREP (!reparation); RACT
     (Reactant or reagent)
        (preparation of \beta-amino tetrahydroimidazo[1,2-a]pyra: ines and
        tetrahydrotrioazolo[4,3 a]pyrazines as dipeptidyl peltidase inhibitors)
     274-79-3 CAPLUS
1S
     Imidazo[1,2-a]pyrazine (8C , 9CI) (CA INDEX NAME)
Ch
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RN 109113-96-4 CAPLUS

CN Imidazo[1,2-a]pyrazine, 2- trifluoromethyl)- (9CI) (CA [NDEX NAME)

REFERENCE COUNT:

3 "HERE ARE 3 CITED REFERENCES FVAILABLE FOR THIS :: ECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

LE7 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:6 5619 CAPLUS

DC CUMENT NUMBER:

IN JENTOR (S):

137:16 548

T] [LE:

Preparation of bicyclic nitrogenous fused-ring compounds such as imidazopyrazines, etc., as

corticotropin-releasing factor receptor antagonists

Hibi, Shigeki; Takahashi, Yoshinori; Hoshino, Yorihima; Kikuchi, Koichi; Soejima, Motohiro;

Yoshiuchi, Tatsuya; Shin, Kogyoku; (no, Mutsuko; Shibata, Hisashi; Ino, Mitsuhiro; Hirakawa, Tetsuya

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|------------------------|---------|-------|-------------|----------------|---------|----------------|-----------------|----------|--------|-----|----------|------|-------|-----|--|
| WO 2002062800          |         |       | A1 20       |                | 0020815 |                | WO 2002-JI 1098 |          |        |     |          |      |       |     |  |
| ₩:                     | AE, AG, | AL, A | м, ат,      | AU,            | ΑZ,     | BA,            | BB,             | BG,      | IR,    | BY, | BZ,      | CA,  | CH,   | CN, |  |
|                        | CO, CR, | CU, C | Z, DE,      | DK,            | DM,     | DZ,            | EC,             | EE,      | Ε3,    | FI, | GB,      | GD,  | GE,   | GH, |  |
|                        | GM, HR, | HU, I | D, IL,      | IN,            | IS,     | JP,            | KE,             | KG,      | 12,    | KR, | ΚZ,      | LC,  | LK,   | LR, |  |
|                        | LS, LT, | LU, L | V, MA,      | MD,            | MG,     | MK,            | MN,             | MW,      | ١X,    | MZ, | NO,      | NZ,  | OM,   | PH, |  |
|                        | PL, PT, | RO, R | U, SD,      | SE,            | SG,     | SI,            | SK,             | SL,      | 3J,    | TM, | TN,      | TR,  | TT,   | TZ, |  |
|                        | UA, UG, | US, U | z, vn,      | YU,            | ZA,     | ZM,            | ZW,             | AM,      | IZ,    | BY, | KG,      | ΚZ,  | MD,   | RU, |  |
|                        | TJ, TM  |       |             |                |         |                |                 |          |        |     |          |      |       |     |  |
| RW:                    | GH, GM, | KĖ, L | s, MW,      | MZ,            | SD,     | SL,            | SZ,             | TZ,      | ιG,    | ZM, | ZW,      | ΑT,  | BE,   | CH, |  |
|                        | CY, DE, | DK, E | S, FI,      | FR,            | GB,     | GR,            | ΙE,             | IT,      | IJ,    | MC, | NL,      | PT,  | SE,   | TR, |  |
|                        | BF, BJ, | CF, C | G, CI,      | CM,            | GΑ,     | GN,            | GQ,             | GW,      | ١Ĺ,    | MR, | NE,      | SN,  | TD,   | TG  |  |
| EP 1364952             |         |       | A1 20031126 |                |         | EP 2002-7:1424 |                 |          |        |     | 20020208 |      |       |     |  |
| R:                     | AT, BE, | CH, D | E, DK,      | ES,            | FR,     | GB,            | GR,             | IT,      | 11,    | LU, | NL,      | SE,  | MC,   | PT, |  |
|                        | IE, SI, | LT, L | V, FI,      | RO,            | MK,     | CY,            | AL,             | TR       |        |     |          |      |       |     |  |
| US 2004082781          |         |       | A1          | US 2003-4:1741 |         |                |                 | 20030625 |        |     |          |      |       |     |  |
| PRIORITY APPLN. INFO.: |         |       |             |                |         | J              | P 20            | 001-3    | 32 53" | 7   | 7        | A 20 | 0010  | 208 |  |
|                        |         |       |             |                |         | J              | P 20            | 001-1    | 13320  | 80  | i        | A 20 | 00104 | 427 |  |
|                        |         |       |             |                |         | W              | 10 20           | 002-J    | 11 109 | 98  | 1        | W 20 | 0020  | 208 |  |
| OTHER SOURCE(S):       |         |       | ARPAT       | 137:1          | 6954    | 8              |                 |          |        |     |          |      |       |     |  |

GT

MARPAT 137:169548

$$\begin{array}{c|c}
R^2 \\
N & Z \\
R^3
\end{array}$$

I

ΔR The title compds. I [R1 represents hydrogen, C1-€ alkyl, C1-6 alkoxy, etc.; R2 represents halogeno, cyano, nitro, C1-1( alkyl, C2-10 alkenyl, C2-10 alkynyl, etc., R3 represents an optionally substituted C6-14 aromatic hydrocarbon group or an optionally substituted, 5- to 14-membered aromatic heterocyclic group; and X, Y, and Z each independently represents nitrogen or CR4 (wherein R4 represents hydrogen, halogeno, cyano, nitro, optionally halogenated C1-6 allyl, etc.), provided that at least two of X, Y, and Z represent CR4] are | repared In an in vitro test for binding to the corticotropin-releasing factor receptor, compds. of this invention in vitro showed IC50 values of 10 nM to 5000 nM.

IC ICM C07D487-04

> ICS C07D471-04; A6:K031-4985; A61K031-5025; A61F 331-5377; A61K031-437; A61K031-519; A(1P043-00; A61P025-28; A61P001-14; A61P003-04; A61P003-10; A61P025-32; A61P025-30; A61P025-20; A61P025-06; A61P025-04; A61P009-10; A61P025-00; A61P021-02

CC 28-17 (Heterocyclic Compounds (More Than One Het€ro Atom)) Section cross-refer∈nce(s): 1

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IT
    Mental and behavioral disord :rs
        (autism; preparation and ffect of bicyclic nitrogenou fused-ring compds. such as imidazopyrazines, with corticotropin-releasing factor receptor
        antagonist activity)
IT
    Mental and behavioral disorders
        (bipolar disorder; prepartion and effect of bicyclic itrogenous fused-ring
        compds. such as imidazopy azines, with corticotropin-releasing factor
        antagonist activity)
IT
     Mental and behavioral disorders
        (depression; preparation and effect of bicyclic nitrog nous fused-ring
        compds. such as imidazopy azines, with corticotropin-releasing factor
        receptor antagonist activ ty)
IT
     Nausea
        (neurogenic; preparation and effect of bicyclic nitrogenous
        fused-ring compds. such a: imidazopyrazines, with cort cotropin-
        releasing factor receptor antagonist activity)
     Mental and behavioral disorders
IT
        (phobia; preparation and ffect of bicyclic nitrogenous fused-ring compds.
        such as imidazopyrazines, with corticotropin-releasing factor
        antagonist activity)
     Alzheimer's disease
IT
     Anti-Alzheimer's agents
     Antidepressants
     Antidiarrheals
     Antiemetics
     Anxiety
     Anxiolytics
     Diarrhea
     Laxatives
       Schizophrenia
     Stress, animal
        (preparation and effect c bicyclic nitrogenous fused-:ing compds. such as
        imidazopyrazines, with cc ticotropin-releasing factor .eceptor
        antagonist activity)
     Mental and behavioral disord :rs
IT
        (senile psychosis; preparation and effect of bicyclic aitrogenous fused-ring
        compds. such as imidazopy azines, with corticotropin-releasing factor
        receptor antagonist activ ty)
     70233-10-2P, (E)-4-(2,4-Dime hylphenyl)-3-buten-2-one 446173-43-4P
IT
     , 8-Chloro-2-ethylimidazo[1, -a]pyrazine-3-carboxylic aci← methyl ester
     446273-45-6P, 5-Chloro-3-(2, -dichlorophenyl)-2-pyrazinam. 1e
     446273-47-8P, 8-Bromo-2-ethy -6-methylimidazo[1,2-a]pyraz 1e-3-
     carboxylic acid methyl ester 446273-49-0P 446273-51-4P
     , 1-(8-Chloro-2-ethylimidazc 1,2-alpyrazin-3-yl)butyl ethyl ether
     446273-53-6P, 1-(8-Chloro-2- thylimidazo[1,2-a]pyrazin-3-\l)-1-
     butanol 446273-55-8P, 1-(8-C.loro-2-ethylimidazo[1,2-a]py: 3zin-3-
     yl)-1-butanone 446273-58-1, 446273-59-2P, 4-Bromo-6-cl loro-3-
                      446273-60-5', 6-Chloro-4-(2,4-dimethylphenyl)-3-
     pyridazinamine
     pyridazinamine 446273-61-6', 4-(2,4-Dimethylphenyl)-3-pyridazinamine
     446273-62-7P, 8-(2,4-Dimethy phenyl)-2-ethylimidazo[1,2-b] pyridazine-3-
     carboxylic acid methyl ester 446273-63-8P, 8-Bromo-6-met 1yl-2-
     (methylsulfanyl)imidazo[1,2-.]pyridine-3-carboxylic acid €thyl ester
     446273-65-0P, 8-Bromo-6-meth 1-2-(methylsulfanyl)imidazo[ .2-a]pyridine-3-
                       446273-66- P, tert-Butyl N-[8-bromo-6-m∈thyl-2-
     carboxylic acid
     (methylsulfanyl)imidazo[1,2- ]pyridin-3-yl]carbamate
                                                              446273-67-2P,
     tert-Butyl N-[8-bromo-6-meth 1-2-(methylsulfanyl)imidazo[:,2-a]pyridin-3-
                             4462 3-68-3P, N-[8-Bromo-6-methyl 2-
     yl]-N-propylcarbamate
     (methylsulfanyl)imidazo[1,2-1]pyridin-3-yl]-N-propylamine
                                                                  446273-69-4P,
     N-[8-Bromo-6-methyl-2-(methy sulfanyl)imidazo[1,2-a]pyrid: 1-3-yl]-N,N-
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dipropylamine 446273-70-7P 446273-71-8P, Ethyl

```
8-methoxy-2-(methylsu fanyl)imidazo[1,2-a]pyrazine 3-carboxylate
446273-72-9P, Ethyl 8 chloro-2-(methylsulfanyl)imic.izo[1,2-
a]pyrazine-3-carboxylete 446273-73-0P, tert-Butyl
N-[8-chloro-2-(methyl:ulfanyl)imidazo[1,2-a]pyrazir -3-yl]carbamate
446273-74-1P, N-[8-Ch oro-2-(methylsulfanyl)imidazc[1,2-a]pyrazin-
3-yl]-N-propylamine 446273-75-2P, N-[8-Chloro-2-
(methylsulfanyl)imida: o[1,2-a]pyrazin-3-yl]-N,N-dir copylamine
446273-76-3P, 6-Chlor -4-(4-methoxy-2-methylphenyl) -3-pyridazinamine
446273-77-4P, 4-(4-Me hoxy-2-methylphenyl)-3-pyride inamine
                                                               446273-78-5P
446273-79-6P, 2-[(6-C: loro-4-pyrimidinyl)amino]-1-k tanol
                                                             446273-80-9P,
2-(4-Pyrimidinylamino -1-butanol
                                   446273-81-0P, 2 [ (5-Bromo-4-
                              446273-82-1P, 8-Bromp-2-ethyl-2,3-
pyrimidinyl) amino] -1-1 utanol
                                  446273-83-2P, 8-Fromo-2-ethylimidazo[1,2-
dihydroimidazo[1,2-c]; yrimidine
               446273 84-3P
                              446273-85-4P
                                             446273 ·86-5P,
c]pyrimidine
1-(8-Bromo-2-ethylimicazo[1,2-c]pyrimidin-3-yl)butyl ethyl ether
446273-87-6P, N-[8-(2 4-Dichlorophenyl)-2-ethylimic 120[1,2-
a]pyrazin-3-yl)-N, N-d propylamine 446273-88-7P,
1-[2-Ethyl-8-(2-metho:y-4,6-dimethylphenyl)imidazo:1,2-a]pyrazin-3-yl]-1-
          446273-89-9P, 4-(2,4-Dimethylphenyl)-6-methyl-3-pyridazinamine
butanone
446273-90-1P, 8-(2,4-!imethylphenyl)-2-ethyl-6-meth/limidazo[1,2-
b]pyridazine-3-carbox lic acid methyl ester
                                              446273-91-2P,
8-(2,4-Dimethylphenyl -2-ethyl-6-methylimidazo[1,2...)pyridazine-3-
                446: 73-92-3P, tert-Butyl N-[8-(2, 4-dimethylphenyl)-2-
carboxylic acid
ethyl-6-methylimidazo 1,2-b]pyridazin-3-yl]carbamat = 446273-93-4P,
8-(2,4-Dimethylphenyl -2-ethyl-6-methylimidazo[1,2->]pyridazin-3-amine
446273-94-5P, 8-(2,4-i imethylphenyl)-2-ethylimidazc[1,2-b]pyridazine-3-
                446: 73-95-6P, tert-Butyl N-[8-(2, \-dimethylphenyl)-2-
carboxylic acid
ethylimidazo[1,2-b]py:idazin-3-yl]carbamate
                                              446273-96-7P,
8-(2,4-Dimethylphenyl -2-ethylimidazo[1,2-b]pyridazin-3-amine
RL: RCT (Reactant); S:N (Synthetic preparation); PFEP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of bicyclic nitrogenous fused-ring compds. such
   as imidazopyrazine:, as corticotropin-releasing factor receptor
   antagonists)
446274-02-8P, N-[8-(2 Bromo-4-methoxyphenyl)-2-
(methylsulfanyl)imida: o[1,2-a]pyrazin-3-yl]-N-cyclc propylmethyl-N-(3-
fluoropropyl) amine 44 £ 274-03-9P, N,N-Dicyclopropylm thyl-N-[2-
(methylsulfanyl)-8-(2.4,6-trimethoxyphenyl)imidazo[1,2-a]pyrazin-3-
yl]amine 446274-04-0P 446274-05-1P,
N-Cyclopropylmethyl-N isopropyl-N-[2-(methylsulfanyl)-8-(2,4,6-
trimethoxyphenyl)imidazo[1,2-a]pyrazin-3-yl]amine 446274-06-2P,
N-Cyclopropylmethyl-N [8-(2,6-dimethoxy-4-methylphe 1yl)-2-
(methylsulfanyl)imida: o[1,2-a]pyrazin-3-yl]-N-isobuzylamine
446274-07-3P, N-Cyclo; ropylmethyl-N-isobutyl-N-[8-(2-methoxy-4,6-
dimethylphenyl) -2-(me: hylsulfanyl) imidazo[1,2-a]pyr xzin-3-yl] amine
446274-08-4P, N-[8-(2 Chloro-4-methoxyphenyl)-2-
(methylsulfanyl)imida: o[1,2-a]pyrazin-3-yl]-N-cyclopropylmethyl-N-
isobutylamine 446274-09-5P, N-Cyclopropylmethyl-N-[3-(4-methoxy-
2,6-dimethylphenyl)-2 (methylsulfanyl)imidazo[1,2-a;pyrazin-3-yl]-N-
propylamine 446274-10-8P, N-Cyclopropylmethyl-N-[8-(4-methoxy-2-
methylphenyl) -2- (methylsulfanyl) imidazo[1,2-a]pyrazin-3-yl]-N-propylamine
446274-11-9P, N-Cyclo; ropylmethyl-N-[8-(2-methoxy-4 methylphenyl)-
2-(methylsulfanyl)imicazo[1,2-a]pyrazin-3-yl]-N-propylamine
446274-12-0P, N-[8-(4 Chloro-2-methoxyphenyl)-2-
(methylsulfanyl)imidaro[1,2-a]pyrazin-3-yl]-N-cyclcoropylmethyl-N-
propylamine 446274-13-1P, N-Cyclopropylmethyl-N-[8-(2,4-
dimethoxyphenyl) -2- (methylsulfanyl) imidazo[1,2-a]pyrazin-3-yl] -N-
propylamine 446274-14-2P, 4-[3-[(Cyclopropylmethyl)(propyl)amino
]-2-(methylsulfanyl)iridazo[1,2-a]pyrazin-8-yl]-3-methylbenzonitrile
446274-15-3P, N-[8-(2-Chloro-4-methoxyphenyl)-2-
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IT

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nethylsulfanyl)imidazo[1,2-a] yrazin-3-yl]-N-(1-ethylpropy) amine
4 16274-16-4P, N-(1-Ethylpropyl -N-[8-(2-methoxy-4,6-
c methylphenyl)-2-(methylsulfa yl)imidazo[1,2-a]pyrazin-3-yl amine
4:6274-17-5P, N-Cyclopropylmet yl-N-[8-(4-methyl-1,3-benzodi xol-5-

y )-2-(methylsulfanyl)imidazo{ ,2-a]pyrazin-3-yl]-N-propylan ne

4 (6274-18-6P, N-Cyclopropylmet yl-N-[8-(5-methyl-2,3-dihydrc 1,4-
t:nzodioxin-6-yl)-2-(methylsul anyl)imidazo[1,2-a]pyrazin-3-1]-N-
r opylamine 446274-20-0P, N-Cy lopropylmethyl-N-[8-(2-metho> -4-
 .rifluoromethyl)phenyl]-2-(me hylsulfanyl)imidazo[1,2-a]pyr :zin-3-yl]-N-
r opylamine 446274-22-2P, N,N- icyclopropylmethyl-N-[8-(2-
n:thoxy-4-(trifluoromethyl)phe yl]-2-(methylsulfanyl)imidazc[1,2-a]pyrazin-
2 yl]amine 446274-23-3P, N,N-D cyclopropylmethyl-N-[8-(4-met loxy-
2 (trifluoromethyl)phenyl]-2-( ethylsulfanyl)imidazo[1,2-a]p razin-3-
) lamine 446274-24-4P, N,N-Dic clopropylmethyl-N-[8-(2,4-
c methoxyphenyl)-2-(methylsulf nyl)imidazo[1,2-a]pyrazin-3-y ]amine
4 16274-25-5P 446274-26-6P, N, N Dicyclopropylmethyl-N-[8-
(:-methoxy-2-methylphenyl)-2-(:ethylsulfanyl)imidazo[1,2-a]r razin-3-
y.]amine 446274-27-7P, N,N-Dic clopropylmethyl-N-[8-(2-methc:y-4-
π:thylphenyl)-2-(methylsulfany )imidazo[1,2-a]pyrazin-3-yl]a iine
4 16274-28-8P, N-[8-(2-Chloro-4 (trifluoromethoxy)phenyl]-2-
(methylsulfanyl)imidazo[1,2-a]:yrazin-3-yl]-N,N-
tis(cyclopropylmethyl)amine 44:274-29-9P,
N-Dicyclopropylmethyl-N-[8-(,4-dichlorophenyl)-2-
(nethylsulfanyl)imidazo[1,2-a] yrazin-3-yl]amine 446274-30-2
4 | 6274-31-3P, 2-[[8-(2-Chloro--methoxyphenyl)-2-
(wethylsulfanyl)imidazo[1,2-a] yrazin-3-yl](cyclopropylmethy )amino]-1-
e hanol 446274-32-4P 446274-33 5P 446274-34-6P
, N, N-Bis (cyclopropylmethyl) -8 [6-(dimethylamino) -4-methyl-2 pyridyl] -2-
(methylsulfanyl)imidazo[1,2-a] yrazin-3-amine 446274-35-7P,
N [8-(2-Chloro-4-methoxyphenyl -2-(methylsulfanyl)imidazo[1,'-a]pyrazin-3-
y ]-N-cyclopropylmethyl-N-[3-( ethylsulfanyl)propyl]amine
4 16274-36-8P 446274-37-9P, 1-[ 8-(2-Chloro-4-
m:thoxyphenyl)-2-(methylsulfan l)imidazo[1,2-a]pyrazin-3-
y ] (cyclopropylmethyl) amino] - 2 propanol 446274-38-0P,
1 [[8-(2-Chloro-4-(trifluorome hoxy)phenyl]-2-(methylsulfany )imidazo[1,2-
a pyrazin-3-yl] (cyclopropylmet yl)amino]-2-propanol 446274-3:-1P
4 | 6274-40-4P 446274-41-5P, 2-[ 8-[2-Chloro-4-
(.rifluoromethoxy)phenyl]-2-(m.thylsulfanyl)imidazo[1,2-a]py azin-3-
y ] (cyclopropylmethyl) amino] ac tamide 446274-42-6P
4 16274-43-7P 446274-44-8P 4462 4-45-9P,
N [8-[2-Chloro-4-(trifluoromet:oxy)phenyl]-2-(methylsulfanyl imidazo[1,2-
a pyrazin-3-yl]-N-cyclopropylm: thyl-N-(2-furylmethyl)amine
4 16274-46-0P 446274-48-2P 4462 4-49-3P,
N [8-[2-Chloro-4-(trifluoromet oxy)phenyl]-2-(methylsulfanyl imidazo[1,2-
a pyrazin-3-yl]-N-cyclopropylm thyl-N-(2-morpholinoethyl)ami w
4 16274-50-6P 446274-51-7P, N,N Bis(cyclopropylmethyl)-8-
[.-(dimethylamino)-2-methoxyph nyl]-2-(methylsulfanyl)imidaz >[1,2-
a pyrazin-3-amine 446274-53-9P N-[8-(2-Chloro-4-methoxypher.1)-
2 (methylsulfinyl)imidazo[1,2-.]pyrazin-3-yl]-N-cyclopropylm:thyl-N-
propylamine 446274-55-1P, N-[8 (2-Chloro-4-methoxyphenyl)-2-
( nethylsulfonyl) imidazo[1,2-a]; yrazin-3-yl]-N-cyclopropylmet nyl-N-
p opylamine 446274-57-3P 446274-59-5P,
4 [3-[Di(cyclopropylmethyl)ami o]-2-(methylsulfanyl)imidazo[ ,2-a]pyrazin-
ε yl]-3-methoxybenzonitrile 44:274-61-9P, N,N-
E s(cyclopropylmethyl)-N-[8-(2 methoxy-4-(pyrrolidin-1-yl)ph:nyl)-2-
( tethylsulfanyl) imidazo[1,2-a]; yrazin-3-yl] amine 446274-63-1,
6 Chloro-3-(1-ethoxybutyl)-2-e hyl-8-(2-methoxy-4,6-
o methylphenyl)imidazo[1,2-a]p razine 446274-65-3P,
& (2-Chloro-4-methoxyphenyl)-3 (1-ethoxybutyl)-2-
(methylsulfanyl)imidazo[1,2-a]; yrazine 446274-67-5P,
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3-(1-Ethoxybutyl)-8-(2-ethoxy-4,6-dimethylphenyl)-2
(methylsulfanyl) imidazo 1,2-a]pyrazine 446274-69-7P
446274-71-1P 446274-75-'P 446274-77-7P
446274-78-8P, N-[8-(2-C:loro-4-methoxyphenyl)-2-methckyimidazo[1,2-
a]pyrazin-3-yl]-N-cyclo:ropylmethyl-N-propylamine 44&274-79-9P,
N-Cyclopropylmethyl-N-[.-methoxy-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[ ,2-a]pyrazin-3-yl]-N-propylarine
                                                            446274-80-2P.
N-[2-Ethyl-8-(2-methoxy 4-methylphenyl)imidazo[1,2-b])yridazin-3-yl]-N,N-
                446274-:1-3P, N-[2-Ethyl-8-(2-methox; -4-
dipropylamine
methylphenyl)imidazo[1, -b]pyridazin-3-yl]-N-(1-ethy propyl)amine
446274-82-4P, N-[8-(2,4 Dichlorophenyl)-2-ethyl-6-met noxyimidazo[1,2-
b]pyridazin-3-yl]-N,N-d propylamine
                                      446274-83-5P, 1 · [2-Ethyl-8-(4-
methoxy-2-methylphenyl) midazo[1,2-b]pyridazin-3-yl] · N-isobutyl-N-
propylamine
              446274-84 6P, N-[8-(2,6-Dimethoxy-3-py:idyl)-2-
ethylimidazo[1,2-b]pyricazin-3-yl]-N,N-dipropylamine
                                                       446274-85-7P,
N-[8-(2,6-Dimethyl-3-py:idyl)-2-ethylimidazo[1,2-b]pycidazin-3-yl]-N,N-
dipropylamine
               446274-:6-8P, N-[2-Ethyl-8-(6-methox)-2-methyl-3-
pyridyl) imidazo[1,2-b]p ridazin-3-yl]-N,N-dipropylam ne
                                                          446274-87-9P,
N-[2-Ethyl-8-(2-methoxy 4,6-dimethylphenyl)imidazo[1,2-b]pyridazin-3-yl]-
                    446:74-88-0P, N-[8-(4-Chlorophenyl)-2-ethylimidazo[1,2-
N, N-dipropylamine
b]pyridazin-3-yl]-N,N-d propylamine
                                     446274-89-1P, F - [8-(2,4-Dimethoxy-6-
methylphenyl) -2-ethylim dazo[1,2-b]pyridazin-3-yl]-N. N-dipropylamine
446274-90-4P, N-[8-(2-C:loro-4-methoxyphenyl)-2-ethy.imidazo[1,2-
b]pyridazin-3-yl]-N, N-d propylamine
                                      446274-91-5P, N - [2-Ethyl-8-(4-
methoxy-2,6-dimethylphe,yl)imidazo[1,2-b]pyridazin-3 /l]-N,N-dipropylamine
446274-92-6P
               446274-9. -7P
                              446274-94-8P, N,N-Dicyclopropylmethyl-N-[2-
Ethyl-8-(2-methoxy-4,6-cimethylphenyl)imidazo[1,2-b]; /ridazin-3-yl]amine
446274-95-9P, N-Cyclopropylmethyl-N-[2-Ethyl-8-(2-met noxy-4,6-
dimethylphenyl)imidazo[',2-b]pyridazin-3-yl]-N-propyl mine
                                                             446274-96-0P,
N-[2-Ethyl-8-(2-methoxy 4,6-dimethylphenyl)imidazo[1,?-b]pyridazin-3-yl]-N-
isobutyl-N-propylamine
                        446274-97-1P, N-Cyclopropylmethyl-N-[2-Ethyl-8-(2-
methoxy-4,6-dimethylphe:yl)imidazo[1,2-b]pyridazin-3 /1]-N-(3-
fluoropropyl)amine
                    44:274-98-2P, N-[2-Ethyl-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[ ,2-b]pyridazin-3-yl]-N-(3-fluoropropyl)-N-
              446274-99 3P, 8-(4-Methoxy-2-methylpher/1)-2-
propylamine
(methylsulfanyl)imidazo 1,2-b]pyridazin-3-amine
                                                  44(275-00-9P,
N-[8-(4-Methoxy-2-methy phenyl)-2-(methylsulfanyl)im: lazo[1,2-b]pyridazin-
3-yl]-N, N-dipropylamine
                          446275-01-0P, N,N-Dicyclop: pylmethyl-N-[8-(4-
methoxy-2-methylphenyl) 2-(methylsulfanyl)imidazo[1,2-b]pyridazin-3-
           446275-02-1P, N-[8-(2,4-Dichlorophenyl)-2
yl]amine
(methylsulfanyl)imidazo 1,2-a]pyridin-3-yl]-N,N-diprobylamine
446275-04-3P, N-[8-(2-Methoxy-4,6-dimethylphenyl)-2-
(methylsulfanyl)imidazo 1,2-a]pyridin-3-yl]-N,N-dipropylamine
446275-05-4P, N-[8-(2-C] loro-4-methoxyphenyl)-2-
(methylsulfanyl)imidazo 1,2-a]pyridin-3-yl]-N,N-diprobylamine
446275-06-5P, N-[8-(2,4 Dichlorophenyl)-2-(methylsulf anyl)imidazo[1,2-
                                 446275-07-6P, N-[8-(2,4-Dichlorophenyl)-
a]pyridin-3-yl]-N-isobu:ylamine
2-(methylsulfanyl)imida: o[1,2-a]pyridin-3-yl]-N-isobutyl-N-propylamine
446275-08-7P, N-Cyclopropylmethyl-N-[8-(2,4-dichlorophenyl)-2-
(methylsulfanyl)imidazo 1,2-a]pyridin-3-yl]-N-isobuty tamine
446275-09-8P, N-Butyl-N [8-(2,4-dichlorophenyl)-2-
(methylsulfanyl)imidazo 1,2-a]pyridin-3-yl]-N-isobuty lamine
446275-10-1P, N-[8-(2,4 Dichlorophenyl)-2-(methylsulfanyl)imidazo[1,2-
a]pyridin-3-yl]-N-isobu; yl-N-(2-methoxyethyl)amine
                                                      146275-11-2P,
N-[8-(2,6-Dimethoxy-3-p; ridyl)-2-(methylsulfanyl)imic zo[1,2-a]pyridin-3-
                        446275-12-3P, N-[8-(2,6-Dimet loxy-4-methylphenyl)-
yl]-N,N-dipropylamine
2-(methylsulfanyl)imida: o[1,2-a]pyridin-3-yl]-N,N-dir copylamine
446275-13-4P, N-[8-(2,4 Dichlorophenyl)-2-(methylsulf anyl)imidazo[1,2-
a]pyridin-3-yl]-N-(3-flioropropyl)-N-isobutylamine
                                                    146275-14-5P,
N-[8-(2,4-Dichloropheny])-2-(methylsulfanyl)imidazo[1.2-a]pyridin-3-yl]-N-
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(4 luorobutyl) -N-isobutylamine
                                  446275-15-6P, N-[8-(2,4-Dime hoxyphenyl)-
2- ethylsulfanyl)imidazo[1,2-a] yridin-3-yl]-N,N-dipropylamin
446 75-16-7P, N-[8-(2,6-Dimethyl 3-pyridyl)-2-(methylsulfanyl) midazo[1,2-
a]r ridin-3-yl]-N, N-dipropylamin
                                    446275-17-8P, N-Cyclopropy methyl-N-[8-
(2, -dichlorophenyl)-2-(methylsu fanyl)imidazo[1,2-a]pyridin-3 yl]-N-
prc ylamine
             446275-18-9P, N-[8 (2,4-Dichlorophenyl)-2-
(mε hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-(3-fluoropropyl) N-
              446275-19-0P, N-Cy lobutylmethyl-N-[8-(2,4-dichl rophenyl)-2-
prc ylamine
(m∈ hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-propylamine
                                                            44 275-20-3P,
N-(-(6-Methoxy-2-methyl-3-pyrid 1)-2-(methylsulfanyl)imidazo[,2-
a]r ridin-3-yl]-N,N-dipropylamin
                                    446275-21-4P, N-[8-(2,4-
Dic:lorophenyl)-2-(methylsulfany)imidazo[1,2-a]pyridin-3-yl]- -(4-
fluorobutyl) - N-propylamine
                            446 75-22-5P, N-Cyclopropylmethyl N-[8-(2,6-
dim thoxy-4-methylphenyl)-2-(met ylsulfanyl)imidazo[1,2-a]pyri in-3-yl]-N-
(3- luoropropyl) amine
                        446275-2 -6P, N-[8-(2,6-Dimethoxy-4-me hylphenyl)-
2-( ethylsulfanyl)imidazo[1,2-a] yridin-3-yl]-N-(3-fluoropropy )-N-
pro ylamine
              446275-24-7P, N-Cy lopropylmethyl-N-[8-(2,4-dich orophenyl)-
2-( ethylsulfanyl)imidazo[1,2-a].yridin-3-yl]-N-(3-fluoropropy )amine
446:75-25-8P
               446275-26-9P, N-[ -(2,6-Dimethoxy-4-methylpheny )-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-(3-fluoropropyl) N-
isc outylamine
                446275-27-0P, N- 8-(2,4-Dimethoxy-6-methylphen 1)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446.75-28-1P, N-[8-(2-Ethoxy-6-m-thoxy-4-methylphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-29-2P, N-[8-(2,6-Dimethox -4-methylphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-di(3-fluoropro yl)amine
446 75-30-5P, N-[8-(2-Chloro-6-m thoxy-4-methylphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-31-6P, N-[8-Mesityl-2-(me hylsulfanyl)imidazo[1,2-a]pyr din-3-yl]-
N,N dipropylamine
                    446275-32-7P N-[8-(2-Methoxy-4-methylphen 1)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-33-8P, N-[8-(4-Ethyl-2,6- imethoxyphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-34-9P, N-Cyclopropylmethy -N-[8-(2,6-dimethoxy-4-methyl henyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-propylamine
N,N Dicyclopropylmethyl-N-[8-(2, -dimethoxy-4-methylphenyl)-2-
(m∈ hylsulfanyl)imidazo[1,2-a]py idin-3-yl]amine
                                                  446275-36-1
446.75-37-2P, N-[8-(2-Fluoro-4,6 dimethoxyphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-38-3P, N-[8-(4-Chloro-2-m thoxyphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446:75-39-4P, N-[2-(Methylsulfan 1)-8-(2,4,6-trimethoxyphenyl) midazo[1,2-
a]p ridin-3-yl]-N,N-dipropylamin
                                    446275-40-7P, N-[8-(2,4-
Dic lorophenyl) -2- (methylsulfany ) imidazo[1,2-a]pyridin-3-yl] - '-propyl-N-
                    446275-41-8P N-[8-(4-Methoxyphenyl)-2-
(2- ropynyl)amine
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 '75-42-9P, N-[8-(2,6-Dimethox'-4-methylphenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-propyl-N-(3-thie yl)amine
446:75-43-0P, N-(2-Butynyl)-N-[8 (2,4-dichlorophenyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-propylamine
                                                            44 275-44-1P,
N-[:-(2,4-Dichloro-6-methoxyphen:1)-2-(methylsulfanyl)imidazo[,2-
a]p ridin-3-yl]-N, N-dipropylamin
                                    446275-45-2P, N-[8-(2,4-
Dic lorophenyl) -2- (methylsulfany )imidazo[1,2-a]pyridin-3-yl] - - ethyl-N-
             446275-46-3P, N-[8 (4-Methoxy-2-methylphenyl)-2-
prc ylamine
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N,N-dipropylamine
446 75-47-4P, N-Cyclobutylmethyl N-[8-(2,6-dimethoxy-4-methylp enyl)-2-
(me hylsulfanyl)imidazo[1,2-a]py idin-3-yl]-N-propylamine
                                                            44 275-48-5P,
N-[:-(2,6-Dimethoxy-4-methylphen-1)-2-(methylsulfanyl)imidazo[,2-
a]p ridin-3-yl]-N-propyl-N-(2-propynyl)amine
                                             446275-49-6P,
N-[:-[4-Chloro-2-(trifluoromethy)phenyl]-2-(methylsulfanyl)im dazo[1,2-
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a]pyridin-3-yl]-N,N-dipro ylamine 446275-50-9P, N-[8-4-Chloro-2,6-
dimethoxyphenyl)-2-(methy sulfanyl)imidazo[1,2-a]pyridi::-3-yl]-N,N-
               446275-51 OP, N-[8-(4-Chloro-2,6-dimethoxyphenyl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N-cyclobuty methyl-N-
propylamine
             446275-52-1 , N-[8-[4-Methoxy-2-(trifluoromethyl)phenyl]-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N,N-dipropylamine
446275-53-2P, N-[8-(4-Met·yl-1,3-benzodioxol-5-yl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N, N-dipropylamine
446275-54-3P, N-Butyl-N-c clobutylmethyl-N-[8-(2,6-dimethoxy-4-
methylphenyl) -2-(methylsu fanyl)imidazo[1,2-a]pyridin-3 yl]amine
446275-55-4P, N-Cyclobuty methyl-N-[8-(2,6-dimethoxy-4-methylphenyl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N-ethylamine
                                                          446275-56-5P,
N-[8-[2-Chloro-4-(trifluo omethoxy)phenyl]-2-(methylsulfanyl)imidazo[1,2-
a]pyridin-3-yl]-N,N-dipro;ylamine
                                   446275-57-6P, N-Cyclobutylmethyl-N-
cyclopropylmethyl-N-[8-(2 6-dimethoxy-4-methylphenyl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]amine
                                                 446275-58-7P,
N-\{8-(5-Methyl-2,3-dihydr<-1,4-benzodioxin-6-yl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N,N-dipropylamine
446275-61-2P, N-Cyclobuty methyl-N-[8-(2,6-dimethoxy-4-methylphenyl)-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-yl]-N-(3-fluoropropyl)amine
446275-62-3P, N,N-Bis(pro; yl)-8-[6-(dimethylamino)-4-methyl-3-pyridyl]-2-
(methylsulfanyl)imidazo[1 2-a]pyridin-3-amine
                                               446275-63-4P
446275-64-5P
             446275-65- P
                              446275-66-7P
                                             446275-67-8P
                                                           446275-68-9P
446275-69-0P
             446275-70- P
                              446275-71-4P
                                             446275-72-5P
                                                            446275-73-6P
446275-74-7P 446275-75-1P
                             446275-77-0P, N-Butyl-N-cyclobutylmethyl-N-
[8-(2,4-dimethoxy-6-methy phenyl)-2-(methylsulfanyl)imidazo[1,2-a]pyridin-
            446275-78-1P N-Butyl-N-cyclobutylmethyl-N-[8-(2,4-dimethyl-6-
3-yl]amine
methoxyphenyl) -2-(methyls: lfanyl) imidazo[1,2-a]pyridin-3-yl] amine
446275-79-2P, 8-(2,4-Dich orophenyl)-3-methyl-2-
(methylsulfanyl)imidazo[1 2-a]pyridine
                                         446275-80-5P,
1-[8-(2,4-Dichlorophenyl) 2-ethylimidazo[1,2-c]pyrimidin-3-yl]butyl ethyl
        446275-82-7P, 8-(:-Chloro-4-methoxyphenyl)-3-(1-ethoxybutyl)-2-
ether
ethylimidazo[1,2-c]pyrimicine
                               446275-83-8P, 3-(1-Ethoxybutyl)-2-ethyl-8-
(6-methoxy-2-methyl-3-pyr dyl)imidazo[1,2-c]pyrimidine
446278-20-2P 446278-22-4P
                            446278-24-6P 446278-25-7P
446278-27-9P
              446278-29- P
RL: PAC (Pharmacological ctivity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Fiological study); PREP (Preparation); USES
   (preparation of bicycl.c nitrogenous fused-ring compds. such as
   imidazopyrazines, as corticotropin-releasing factor receptor
   antagonists)
74-88-4, Methyl iodide, reactions
                                    75-15-0, Carbon disulfide, reactions
75-65-0, tert-Butyl alcohol, reactions
                                       96-20-8, 2-Amino-1-butanol
105-36-2, Ethyl bromoacetate 107-08-4, Propane iodide
                                                          123-38-6,
Propionaldehyde, reactions
                            124-63-0, Methanesulfonyl chloride
927-77-5, Propylmagnesium bromide
                                    1193-21-1, 4,6-Dichloropyrimidine
1439-36-7
            4774-10-1, 3-1ethoxy-2-pyrazinamine 5469-69-2,
3-Amino-6-chloropyridazine
                            6863-73-6, 3-Chloro-2-aminopyrazine
15764-16-6, 2,4-Dimethylbenzaldehyde
                                     17282-00-7, 3-Bromo-5-methyl-2-
pyridinamine
              26386-88-9, Diphenylphosphoryl azide
                                                      55499-44-0,
2,4-Dimethylbenzeneboronic acid
                                 55793-97-0, 1-(2,4-Dimethylphenyl)-3-
oxobutyl cyanide
                  68716-47-2, 2,4-Dichlorobenzeneboronic acid
74290-65-6, 3-Bromo-5-met}yl-2-pyrazinamine
                                             114192-09·5, Methyl
2-chloro-3-oxopentanoate
                          208399-66-0, 4-Methoxy-2-methylphenylboronic
       355836-08-7, 4,6-D:methyl-2-methoxybenzeneboronic acid
acid
391954-17-9, 8-Chloro-2-et hylimidazo[1,2-a]pyrazine
                                                     446273-97-8,
3-(2,4-Dichlorophenyl)-2-1 yrazinamine 446273-98-9, 3-Amino-4-brino-6-
chloropyridazine 446274-01-7, 8-(2,4-Dichlorophenyl)-2-
methylimidazo[1,2-a]pyraz:ne
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T'

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RL: F T (Reactant); RACT (Reactant or reagent)
        (r actant; preparation of bicyc .c nitrogenous fused-ring com ds. such as
        im dazopyrazines, as corticotro; in-releasing factor receptor
       an agonists)
IT
     39195 -04-4P, 1-[8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-
     a]pyr zin-3-yl]butyl ethyl ether 445270-84-4P,
     8-(2, -Dichlorophenyl)-2-ethylimid(:o[1,2-a]pyrazine-3-carboxyli acid
     methy ester 446270-85-5P, tert-But /l N-[8-(2,4-dichlorophenyl)-
     N-[8- 2,4-Dichlorophenyl)-2-ethylir dazo[1,2-a]pyrazin-3-yl]-N-p opylamine
     44627 -88-8P 446270-89-9P, 6-Chlore 8-(2,4-
     dichl rophenyl)-2-ethylimidazo[1,2 1]pyrazine-3-carboxylic acid : ethyl
     ester 446270-90-2P, tert-Butyl N-[(-chloro-8-(2,4-
     dichl rophenyl)-2-ethylimidazo[1,2 1]pyrazin-3-yl]carbamate
     44627 -91-3P, N-[6-Chloro-8-(2,4-d: :hlorophenyl)-2-
     ethyl midazo[1,2-a]pyrazin-3-yl]-N propylamine 446270-92-4P,
     N-[6- hloro-8-(2,4-dichlorophenyl) ?-ethylimidazo[1,2-a]pyrazin- -yl]-N,N-
     dipro ylamine 446270-93-5P, 8-(2,4 Dichlorophenyl)-2-ethyl-6-
     methy imidazo[1,2-a]pyrazine-3-carl xylic acid methyl ester
     44627:-94-6P, tert-Butyl N-[8-(2,4: lichlorophenyl)-2-ethyl-6-
     methy imidazo[1,2-a]pyrazin-3-yl]carbamate 446270-95-7P,
     N-[8- 2,4-Dichlorophenyl)-2-ethyl-( methylimidazo[1,2-a]pyrazin- -yl]-N-
     propy amine 446270-96-8P 446270-97-3P,
     8-(2, -Dichlorophenyl)-2-methyl-3-ritroimidazo[1,2-a]pyrazine
     44627 -98-0P, 8-(2,4-Dichloropheny) -2-methylimidazo[1,2-
     a]pyr zine-3-amine 446270-99-1P 446271-00-7P,
     N-[8-2,4-Dichlorophenyl]-2-methyl: nidazo[1,2-a]pyrazin-3-yl]-N-1-
     ethyl ropyl)amine 446271-01-8P 446271-02-9P,
     N-[8- 2,4-Dichlorophenyl]-2-ethylir.dazo[1,2-a]pyrazin-3-yl]-N-( -
     ethyl ropyl) amine hydrochloride 446271-04-1P
     44627 -06-3P 446271-08-5P 446271-1(-9P
     44627 -12-1P 446271-14-3P 446271-16-5P
     44627 -18-7P 446271-20-1P, N-[6-Ch. pro-8-(2-chloro-4-
     metho yphenyl)-2-ethylimidazo[1,2-& pyrazin-3-yl]-N,N-dipropylam ne
     44627 -22-3P, 3-Chloro-4-[6-chloro-3-(dipropylamino)-2-
     ethyl midazo[1,2-a]pyrazin-8-yl]ber conitrile 446271-24-5P,
     N-[8- 2,6-Dimethoxy-4-methylphenyl; 2-ethylimidazo[1,2-a]pyrazin 3-yl]-N,N-
     dipro ylamine 446271-30-3P, N-[8-(4-Chlorophenyl)-2-
     ethyl midazo[1,2-a]pyrazin-3-yl]-N, \( \)-dipropylamine 446271-32-5P,
     N-\{2-thy1-8-(4-methoxyphenyl) imide : o[1,2-a]pyrazin-3-yl]-N,N-
     dipro ylamine 446271-34-7P, N-[2-Et 1yl-8-(2-methoxy-4,6-
     dimet ylphenyl)imidazo[1,2-a]pyraz: 1-3-yl]-N,N-dipropylamine
     44627 .-35-8P, N-Cyclopropylmethyl-N \( [2-Ethyl-8-(2-methoxy-4,6-
     dimet ylphenyl)imidazo[1,2-a]pyrazi 1-3-yl]-N-isobutylamine
     44627 -37-0P, N-[2-Ethyl-6-methoxy-3-(2-methoxy-4,6-
     dimet ylphenyl)imidazo[1,2-a]pyraz: 1-3-yl]-N,N-dipropylamine
     44627 -38-1P, N-[8-(2,6-Dimethoxy-? pyridyl)-2-ethylimidazo[1,2-
     a]pyr zin-3-yl]-N, N-dipropylamine 446271-39-2P,
     N-[2-thyl-8-(6-methoxy-2-methyl-3-syridyl)imidazo[1,2-a]pyrazin 3-yl]-N,N-
     dipro ylamine 446271-41-6P 446271-43-8P,
     N-[2- thyl-8-(2,4,6-trimethyl-3-pyr.dyl)imidazo[1,2-a]pyrazin-3-yl]-N,N-
     dipro ylamine 446271-45-0P, N-[2-Et 1yl-8-(3-methyl-2-
    pyrid l)imidazo[1,2-a]pyrazin-3-yl]-N,N-dipropylamine 446271-47-2P
     , N-[ -Ethyl-8-(6-methoxy-2,4-dimet nyl-3-pyridyl)imidazo[1,2-a]pyrazin-3-
     yl]-N N-dipropylamine 446271-49-4P, N-[2-Ethyl-8-(6-methyl-1,3-
     benzo ioxol-5-yl)imidazo[1,2-a]pyra:in-3-yl]-N,N-dipropylamine
     44627 -53-0P, N-[2-Ethyl-8-(4-methcky-2,5-
     dimet ylphenyl)imidazo[1,2-a]pyrazi 1-3-yl]-N,N-dipropylamine
     44627 -55-2P, N-[8-(2,4-Dichlorophe 1yl)-2-ethylimidazo[1,2-
     a]pyr zin-3-yl]-N-isobutyl-N-propyl mine 446271-57-4P,
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N-Cyclopropylmethyl-N-[8-(2 4-dichlorophenyl)-2-ethylimid zo[1,2-a]pyrazin-
3-yl]-N-propylamine 446271-59-6P, N-[8-(2,4-Dichloropheny)-2-
ethylimidazo[1,2-a]pyrazin- -yl]-N-(3-fluoropropyl)-N-pro ylamine
446271-61-0P, N-Cyclopropyl: ethyl-N-[8-(2,4-dichloropheny )-2-
ethylimidazo[1,2-a]pyrazin- -yl]-N-isobutylamine 446271-6:-2P
446271-65-4P, N-[8-(2,4-Diclorophenyl)-2-ethylimidazo[1, -
a]pyrazin-3-yl]-N-isobutylarine 446271-66-5P,
N-[8-(2,4-Dichlorophenyl)-2 =thylimidazo[1,2-a]pyrazin-3- l]-N-ethyl-N-
isobutylamine 446271-68-7P, V-Butyl-N-[8-(2,4-dichlorophe:yl)-2-ethylimidazo[1,2-a]pyrazin-:-yl]-N-isobutylamine 446271-7(-1P,
N-Benzyl-N-[8-(2,4-dichloro nenyl)-2-ethylimidazo[1,2-a]p razin-3-yl]-N-
isobutylamine 446271-72-3P, N-[8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-.-yl]-N-isobutyl-N-(2-thienylm-thyl)amine
446271-74-5P, N-[8-(2,4-Dic] lorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-(2-furylmethyl)-N-isobutylamine 446271-6-7P,
N-[8-(2,4-Dichlorophenyl)-2 ethylimidazo[1,2-a]pyrazin-3-1]-N-isobutyl-N-
isopentylamine 446271-78-9P N-[8-(2,4-Dichlorophenyl)-2-
ethylimidazo[1,2-a]pyrazin-:-yl]-N-isobutyl-N-[3-(methylsulfanyl)propyl]amine 446271-80-3P,
N-[8-(2,4-Dichlorophenyl)-2 ethylimidazo[1,2-a]pyrazin-3-1]-N-isobutyl-N-
pentylamine 446271-81-4P, N Cyclohexylmethyl-N-[8-(2,4-
dichlorophenyl) -2-ethylimid 20[1,2-a]pyrazin-3-yl] -N-isob tylamine
446271-82-5P, N-[8-(2,4-Dic|lorophenyl)-2-ethylimidazo[1,.-
a]pyrazin-3-yl]-N-(3-fluoro; ropyl)amine 446271-84-7P,
N-[8-(2,4-Dichlorophenyl)-2 ∋thylimidazo[1,2-a]pyrazin-3-1]-N-ethyl-N-(3-
fluoropropyl) amine 446271-8: -8P, N-Butyl-N-[8-(2,4-
dichlorophenyl) -2-ethylimid 20[1,2-a]pyrazin-3-yl]-N-(3-f uoropropyl) amine
446271-87-0P, N-Benzyl-N-[8 (2,4-dichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-:-yl]-N-(3-fluoropropyl)amine
446271-88-1P, N-[8-(2,4-Dic]lorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-(3-fluoro; ropyl)-N-(2-thienylmethyl)amire
446271-89-2P, N-[8-(2,4-Dic] lorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-(3-fluoro; copyl)-N-(2-furylmethyl)amine
446271-90-5P, N-[8-(2,4-Dic] lorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-(3-fluoro; copyl)-N-isopentylamine 446271-91-6P
, N-[8-(2,4-Dichlorophenyl) 2-ethylimidazo[1,2-a]pyrazin-:-yl]-N-(3-
fluoropropyl) -N-[3-(methyls: !fanyl)propyl]amine 446271-92 7P,
N-[8-(2,4-Dichlorophenyl)-2 = thylimidazo[1,2-a]pyrazin-3-yl]-N-(3-
fluoropropyl)-N-pentylamine 446271-93-8P, N-Cyclohexylmetiyl-N-
[8-(2,4-dichlorophenyl)-2-et nylimidazo[1,2-a]pyrazin-3-yl -N-(3-
fluoropropyl) amine 446271-94-9P, N-[8-(2,4-Dichlorophenyl -2-
ethylimidazo[1,2-a]pyrazin-1-yl]-N-(3-fluoropropyl)-N-(4,4,4-
trifluorobutyl) amine 446271-95-0P, N-Cyclopropylmethyl-N- 8-(2,4-
dichlorophenyl) -2-ethylimidazo[1,2-a]pyrazin-3-yl]-N-(3-fluoropropyl)amine
446271-96-1P, N-[8-(2,4-Diclorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-(3-fluoro; ropyl)-N-isobutylamine 446271-97-2P,
N-[8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-3-1]-N-isobutyl-N-
(4,4,4-trifluorobutyl) amine 446271-98-3P, N-[8-(2,4-
Dichlorophenyl) -2-ethylimid zo [1,2-a] pyrazin-3-yl] -N-isop ntylamine
446271-99-4P, N-[8-(2,4-Diclorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N-ethyl-N-is opentylamine 446272-00-0P,
N-Butyl-N-[8-(2,4-dichlorop] = nyl)-2-ethylimidazo[1,2-a]py:azin-3-yl]-N-
isopentylamine 446272-01-1P, N-[8-(2,4-Dichlorophenyl)-2-
ethylimidazo[1,2-a]pyrazin-1-yl]-N-isopentyl-N-(2-thienylnethyl)amine
446272-02-2P, N-[8-(2,4-Diclorophenyl)-2-ethylimidazo[1,:-
a]pyrazin-3-yl]-N, N-diisoper tylamine 446272-03-3P,
N-[8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-3-yl]-N-isopentyl-N-
[3-(methylsulfanyl)propyl] an ine 446272-04-4P,
N-[8-(2,4-Dichlorophenyl)-2.ethylimidazo[1,2-a]pyrazin-3-yl]-N-isopentyl-N-
pentylamine 446272-05-5P 446272-06-6P,
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N-Cyclc ropylmethyl-N-[8-(2,4-dichlo:)phenyl)-2-ethylimidazo[1,2-a pyrazin-
3-y1]-N isopentylamine 446272-07-7P, 1-[8-(2,4-Dichlorophenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]-N-is pentyl-N-propylamine
446272- 8-8P, N-[8-(4-Chloro-2-metho> phenyl)-2-ethylimidazo[1,2-
a]pyraz n-3-yl]-N, N-dipropylamine 446?72-09-9P,
N-[8-(4 Bromo-2-chlorophenyl)-2-ethyl midazo[1,2-a]pyrazin-3-yl]-N N-
dipropy amine 446272-10-2P, N-[8-(2,4 Dibromophenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]-N,N-lipropylamine 446272-11-3P,
N-[8-(4 Bromo-2-fluorophenyl)-2-ethyl midazo[1,2-a]pyrazin-3-yl]-N V-
dipropy amine 446272-12-4P, N-[8-(2-F omo-4-methoxyphenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]-N,N-lipropylamine 446272-13-5P,
N-(sec-utyl)-N-[8-(2,4-dichloropheny.)-2-ethylimidazo[1,2-a]pyraz n-3-yl]-
N-propy amine 446272-14-6P, N-(sec-Bt yl)-N-cyclopropylmethyl-N-
[8-(2,4 dichlorophenyl)-2-ethylimidaz >[1,2-a]pyrazin-3-yl]amine
446272 - 5-7P, N-Butyl-N-(sec-butyl)-N [8-(2,4-dichlorophenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]amin∈ 446272-16-8P,
N-(sec-utyl)-N-[8-(2,4-dichloropheny)-2-ethylimidazo[1,2-a]pyrazn-3-y1]-
N-isobu ylamine 446272-17-9P 446272-13-0P
446272- 9-1P, N-[8-(2,6-Dimethoxy-4-E thylphenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]-N,N-liisobutylamine 446272-20-4P
, N-[8- 2-Chloro-4-methoxyphenyl)-2-& hylimidazo[1,2-a]pyrazin-3-y.]-N,N-
diisobu ylamine 446272-21-5P, N-[2-Et 1yl-8-(2-methoxy-4,6-
446272- 2-6P 446272-23-7P, N-Butyl-N- 8-(2-chloro-4-
methoxy henyl)-2-ethylimidazo[1,2-a]r razin-3-yl]-N-isobutylamine
446272- 4-8P 446272-25-9P, N-Butyl-N 8-(2,6-dimethoxy-4-
methylp enyl)-2-ethylimidazo[1,2-a]py azin-3-yl]-N-isobutylamine
446272 - 6-0P, N-Butyl-N-[2-ethyl-8-(2 methoxy-4,6-
dimethy phenyl)imidazo[1,2-a]pyrazin -- -yl]-N-isobutylamine
446272- 7-1P, N-[8-(2-Chloro-4-metho> phenyl)-2-ethylimidazo[1,2-
a]pyraz n-3-yl]-N-cyclopropylmethyl-N isobutylamine 446272-28-2P
, N-Cyc opropylmethyl-N-[8-(2,6-dimet loxy-4-methylphenyl)-2-
ethylim dazo[1,2-a]pyrazin-3-yl]-N-is butylamine 446272-29-3P
446272- 0-6P 446272-31-7P, 8-(2,4-Dic lorophenyl)-3-
(diprop lamino) - 2 - ethylimidazo [1, 2-a] yrazin - 6-yl cyanide
446272- 2-8P 446272-33-9P 446272-34-0 >
446272- 5-1P, 3-(1-Ethoxybutyl)-2-eth 1-8-(2-methoxy-4,6-
dimethy phenyl)imidazo[1,2-a]pyrazin∈ 446272-36-2P,
8-(2,4- imethoxy-6-methylphenyl)-3-(1 ethoxybutyl)-2-ethylimidazo[',2-
a]pyraz ne 446272-37-3P, 8-(2,6-Dimet loxy-4-methylphenyl)-3-(1-
ethoxyb tyl)-2-ethylimidazo[1,2-a]pyr zine 446272-38-4P,
8-(2-Ch oro-4-methoxyphenyl)-3-(1-eth xybutyl)-2-ethylimidazo[1,2-
a]pyraz ne 446272-39-5P, 4-[2-Ethyl-ε (2-methoxy-4,6-
dimethy phenyl)imidazo[1,2-a]pyrazin-3-yl]-4-heptanol 446272-40-8P
446272--1-9P 446272-42-0P 446272-43-13
446272-4-2P, 8-(2,4-Dimethoxyphenyl) 2-ethyl-3-(1-
                                    46272-45-3P, N-[8-(2,4-
ethylpr pyl)imidazo[1,2-a]pyrazine
Dimethy phenyl)-2-ethyl-6-methylimids:o[1,2-b]pyridazin-3-yl]-N,N-
dipropy amine
               446272-46-4P, N-[8-(2 4-Dimethylphenyl)-2-ethylimic azo[1,2-
b]pyrid zin-3-yl]-N,N-dipropylamine
                                     446272-47-5P, N-[8-(2,4-
Dimetho yphenyl) -2-ethylimidazo[1,2-k pyridazin-3-yl]-N,N-dipropylamine
446272- 8-6P, N-[8-(2,4-Dimethoxypher/l)-2-ethylimidazo[1,2-b]pyricazin-3-
                     446272-49-7P, N Cyclopropylmethyl-N-[8-(2,4-
yl]-N-i obutylamine
dimetho yphenyl)-2-ethylimidazo[1,2-k pyridazin-3-yl]-N-isobutylamine
446272- 0-0P, N-[2-Ethyl-8-(4-methoxy 2-methylphenyl)imidazo[1,2-
b]pyrid zin-3-yl]-N,N-dipropylamine
                                     446272-51-1P, N-[8-(2,4-
Dichlor phenyl)-6-methyl-2-(methylsul anyl)imidazo[1,2-a]pyridin-3-yl]-N,N-
dipropy amine 446272-52-2P, N,N-Diprc >yl-8-(2,4-dichlorophenyl)-
2-(meth lsulfanyl)imidazo[1,2-a]pyraz n-3-amine 446272-53-3P
446272- 4-4P, N-[8-(2,4-Dichloro-6-m∈ hylphenyl)-2-
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thylimidazo[1,2-a]pyrazin-3-j.]-N,N-dipropylamine 446272-55-5P
46272-56-6P, N-[8-(2-Bromo-4 :sopropylphenyl)-2-ethylimida: 5[1,2-
 ]pyrazin-3-yl]-N,N-dipropylar ine 446272-57-7P,
 -[8-(2-Bromo-6-methoxy-4-meth/lphenyl)-2-ethylimidazo[1,2-; pyrazin-3-yl]-
 , N-dipropylamine 446272-58-81. N-[8-(2-Bromo-4,6-
 imethylphenyl) -2-ethylimidaz [1,2-a]pyrazin-3-yl]-N,N-dipropylamine
..46272-59-9P, N-[8-(2,4-Dimet!/lphenyl)-2-ethylimidazo[1,2-
 ]pyrazin-3-yl]-N, N-dipropylar .ne 446272-60-2P,
'-[8-(2-Chloro-4-methylphenyl) 2-ethylimidazo[1,2-a]pyrazin 3-yl]-N,N-
ipropylamine 446272-61-3P, N [8-(2-Chloro-6-methoxy-4-
ethylphenyl)-2-ethylimidazo[ 2-a]pyrazin-3-yl]-N,N-dipropylamine
46272-62-4P 446272-63-5P, N- 3-(2-Chloro-4,6-
imethylphenyl) - 2 - ethylimidaz( [1,2-a]pyrazin-3-yl] - N, N-dipr( pylamine
446272-64-6P, N-Cyclopropylmet nyl-N-[8-(2,4-dichlorophenyl) 2-
• thylimidazo[1,2-a]pyrazin-3-vt]-N-(2-methoxyethyl)amine hycrochloride
-46272-65-7P, N-[8-(2,4-Dichle cophenyl)-2-ethylimidazo[1,2-
. pyrazin-3-yl]-N-(2-methoxyet nyl)amine 446272-66-8P,
:-[8-(2,4-Dichlorophenyl)-2-et \(\text{ylimidazo}[1,2-a]\)\(\text{pyrazin-3-yl}\)\-(2-
ethoxyethyl)-N-propylamine 445272-67-9P, N-Butyl-N-[8-(2,4
cichlorophenyl) -2-ethylimidazc[1,2-a]pyrazin-3-yl]-N-(2-methoxyethyl)amine
~46272-68-0P, N-[8-(2,4-Dichle cophenyl)-2-ethylimidazo[1,2-
.]pyrazin-3-yl]-N-(2-methoxyet yl)-N-pentylamine 446272-69-1P,
:-[8-(2,4-Dichlorophenyl)-2-et nylimidazo[1,2-a]pyrazin-3-yl]-N-isobutyl-N-
 2-methoxyethyl)amine 446272-7)-4P, N-Cyclopropylmethyl-N-[8-
 2,4-dichlorophenyl)-2-ethylir dazo[1,2-a]pyrazin-3-yl]-N-(1-
ethylbutyl)amine 446272-71-51, N-[8-(2,4-Dichlorophenyl)-2-
thylimidazo[1,2-a]pyrazin-3-y:]-N-isobutyl-N-(2-methylbuty:)amine
-46272-72-6P, N-Cyclobutylmetl/l-N-cyclopropylmethyl-N-[8-(:,4-
ichlorophenyl) -2-ethylimidazc [1,2-a]pyrazin-3-yl]amine
446272-73-7P, N-Cyclobutylmetl /1-N-[8-(2,4-dichlorophenyl)-:-
thylimidazo[1,2-a]pyrazin-3-yi]-N-propylamine 446272-74-8P,
:-Cyclobutylmethyl-N-[8-(2,4-cichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-
 -yl]-N-isobutylamine 446272-75-9P, N-[8-(2,4-Dichlorophenyl)-2-
thylimidazo[1,2-a]pyrazin-3-y:]-N-(4-fluorobutyl)-N-propylemine
446272-76-0P, N-Cyclopropylmet 1yl-N-[8-(2,4-dichlorophenyl) 2-
thylimidazo[1,2-a]pyrazin-3-yl]-N-(4-fluorobutyl)amine
-46272-77-1P, N-[8-(2,4-Dichle ophenyl)-2-ethylimidazo[1,2-
.]pyrazin-3-yl]-N-(4-fluorobu:/l)-N-isobutylamine 446272-78-2P
446272-79-3P 446272-80-6P, 3-: [8-(2,4-Dichlorophenyl)-2-
thylimidazo[1,2-a]pyrazin-3-y.] (propyl) amino]propanenitrile
446272-81-7P 446272-82-8P, N-Fityl N-cyclobutylmethyl-N-
 8-(2,4-dichlorophenyl)-2-ethy.imidazo[1,2-a]pyrazin-3-yl]amine
446272-83-9P, N-Butyl-N-cyclor copylmethyl-N-[8-(2,4-
c ichlorophenyl) -2-ethylimidazc [1,2-a]pyrazin-3-yl]amine 446272-84-0P*
    , N-Butyl-N-[8-(2-chloro-6-methoxy-4-methylphenyl)-2-ethylimidazo[1,2-
                                  ***446272-85-1P
a]pyrazin-3-yl]-N-isobutylamine
446272-86-2P, N,N-Dicyclopropy lmethyl-N-[8-(2,6-dimethoxy-4-
ethylphenyl)-2-ethylimidazo[1.2-a]pyrazin-3-yl]amine 446272-87-3P
446272-88-4P, N,N-Dicyclopropy | methyl-N-[2-ethyl-8-(2-methoxy-4,6-
cimethylphenyl)imidazo[1,2-a]r/razin-3-yl]amine 446272-89-5F,
I - [8-(2-Chloro-6-methoxy-4-met nylphenyl) -2-ethylimidazo[1,2-a]pyrazin-3-
[1]-N-cyclopropylmethyl-N-(2-n thylbutyl)amine 446272-90-8P,
-Cyclopropylmethyl-N-[8-(2,6-limethoxy-4-methylphenyl)-2-ethylimidazo[1,2-
i ]pyrazin-3-yl]-N-(2-methylbut /l)amine 446272-91-9P,
-[8-(2-Chloro-4-methoxypheny] -2-ethylimidazo[1,2-a]pyrazir-3-yl]-N-
cyclopropylmethyl-N-(2-methylk tyl)amine 446272-92-0P,
-Cyclopropylmethyl-N-[2-ethy] -8-(2-methoxy-4,6-dimethylpheryl)imidazo[1,2-
| pyrazin-3-yl]-N-(2-methylbut /l)amine 446272-93-1P,
1-[8-(2-Chloro-6-methoxy-4-met lylphenyl)-2-ethylimidazo[1,2-a]pyrazin-3-
[1]-N-cyclopropylmethyl-N-propylamine 446272-94-2P,
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N-Cyclopr pylmethyl-N-[8-(2,6-dimethoxy 4-methylphenyl)-2-ethylimida; >[1,2-
    a]pyrazin 3-yl]-N-propylamine 446272-95 3P, N-[8-(2-Chloro-4-
    methoxyph nyl) -2-ethylimidazo[1,2-a]pyr zin-3-yl]-N-cyclopropylmethyl-N-
    propylami e 446272-96-4P, N-Cyclopropyl ethyl-N-[2-ethyl-8-(2-
    methoxy-4 6-dimethylphenyl)imidazo[1,2-]pyrazin-3-yl]-N-propylamine
    446272-97 5P, N-[8-(2-Chloro-6-methoxy- -methylphenyl)-2-
    ethylimid zo[1,2-a]pyrazin-3-yl]-N,N-di sobutylamine 446272-98-6P
     , N-[8-(2 Chloro-6-methoxy-4-methylphen l)-2-ethylimidazo[1,2-a]pyrazin-3-
    yl]-N-cyc opropylmethyl-N-isobutylamine 446272-99-7P,
    N-[8-(2-C:loro-4-methoxyphenyl)-2-ethyl midazo[1,2-a]pyrazin-3-yl]-N-(3-methoxyphenyl)
    fluoroprojyl)-N-propylamine 446273-00-39, N-[8-(2-Chloro-6-
    methoxy-4 methylphenyl)-2-ethylimidazo[,2-a]pyrazin-3-yl]-N-(3-
    fluoroprojyl)-N-propylamine 446273-01-42, N,N-
    Dicyclopr pylmethyl-N-[8-(2,4-dibromoph nyl)-2-ethylimidazo[1,2-a]pyrazin-
    3-yl]amine 446273-02-5P 446273-03-6P
    446273-04-7P, N,N-Dicyclopropylmethyl-N [8-(2,4-dichloro-6-
    methoxyphenyl) -2-ethylimidazo[1,2-a]pyr:zin-3-yl]amine
    446273-05-8P, N-[8-(2-Bromo-4,6-dimethy phenyl)-2-ethylimidazo[1,2-
    a]pyrazin 3-yl]-N-cyclopropylmethyl-N-p opylamine 446273-06-9P,
    N-[8-(2,4 Dibromophenyl)-2-ethylimidazo 1,2-a]pyrazin-3-yl]-N,N-
    disobuty amine 446273-07-0P 446273-08-_P
    446273-09-2P 446273-10-5P 446273-11-6P,
    N-[8-(2,4 Dichlorophenyl)-2-ethyl-6-met oxyimidazo[1,2-a]pyrazin-3-y]]-N,N-
    dipropylar ine 446273-12-7P, N-[6-Chloro 2-ethyl-8-(2-methoxy-4,6-
    dimethylp! enyl) imidazo[1,2-a]pyrazin-3- 1]-N,N-dipropylamine
    446273-13-8P 446273-14-9P, N-[6-Chloro- -ethyl-8-(2-
    methoxy-4 6-dimethylphenyl)imidazo[1,2-,]pyrazin-3-yl]-N-cyclopropylmethyl-
    N-propylar ine 446273-15-0P, N-[6-Chloro 2-ethyl-8-(2-methoxy-4,6-
    dimethylplenyl)imidazo[1,2-a]pyrazin-3-1]-N-cyclopropylmethyl-N-(3-
    fluoropro; yl) amine 446273-16-1P, N-[6-C:loro-8-(2-chloro-4-
    methoxyphenyl) -2-ethylimidazo[1,2-a]pyr zin-3-yl] -N-cyclopropylmethyl -N-(3-
    fluoropro; yl) amine 446273-17-2P, N-[6-C.loro-8-(2-chloro-4-
    methoxyph(nyl)-2-ethylimidazo[1,2-a]pyr.zin-3-yl]-N-(3-fluoropropyl)-N-
    propylamire 446273-18-3P, N-[6-Chloro-8 (2-chloro-4-
    methoxyph: nyl) -2-ethylimidazo[1,2-a]pyr zin-3-yl]-N-(1-ethylpropyl)amine
    446273-19.4P, N-[8-(2-Chloro-4-methoxyp.enyl)-2-
     (methylsu_fanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-20-7P, N-[8-(2-Methoxy-4,6-dimet ylphenyl)-2-
     (methylsu fanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-21-8P, N-Isobutyl-N-[8-(2-methox -4,6-dimethylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-propylamine
     446273-22-9P, N-[8-(2-Chloro-4-methoxyp.enyl)-2-
     (methylsu.fanyl)imidazo[1,2-a]pyrazin-3 yl]-N-isobutyl-N-propylamine
     446273-23-0P, N-[8-(2,6-Dimethoxy-4-met.ylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-24-1P, N-[8-(2,4-Dimethoxyphenyl -2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-25-2P, N-[8-(2,4-Dimethoxy-6-met ylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-27-4P, N,N-Dicyclopropylmethyl-N [8-(2-methoxy-4,6-
    dimethylplenyl)-2-(methylsulfanyl)imida o[1,2-a]pyrazin-3-yl]amine
     446273-29-6P 446273-31-0P, N-Cyclopropy methyl-N-[8-(2-
    methoxy-4,6-dimethylphenyl)-2-(methylsu fanyl)imidazo[1,2-a]pyrazin-3-yl]-
    N-propylar ine 446273-33-2P, N-[8-(2-Chl ro-4-methoxyphenyl)-2-
     (methylsu.fanyl)imidazo[1,2-a]pyrazin-3 yl]-N-cyclopropylmethyl-N-
    propylamire 446273-35-4P
, N-Cyclopropyl methyl-N-(3-fluoropropyl)-N-[ --(2-methoxy-4,6-dimethylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]amine 446273-37-6P,
    N-[8-(2-C] loro-4-methoxyphenyl)-2-(meth lsulfanyl)imidazo[1,2-a]pyrazin-3-
    yl]-N-cyclopropylmethyl-N-(3-fluoroprop 1)amine 446273-39-8P,
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N, -Dicyclopropylmethyl-N-[8-(2,:-dimethoxy-4-methylphenyl)-2
     (m thylsulfanyl)imidazo[1,2-a]py azin-3-yl]amine 446273-40-1P,
     N- yclopropylmethyl-N-[8-(2,6-di ethoxy-4-methylphenyl)-2-
     (m thylsulfanyl)imidazo[1,2-a]py azin-3-yl]-N-propylamine
     44:273-41-2P, N-Cyclopropylmethy -N-[8-(2,6-dimethoxy-4-
     me hylphenyl) -2-(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]-N (3-
     fl oropropyl)amine 446273-42-3P, N-[8-(2-Chloro-6-methoxy-4-
     me hylphenyl) -2- (methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]-N-
     cy lopropylmethyl-N-(3-fluoropro yl)amine 446278-18-8P
     RL PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (T erapeutic use); BIOL (Biologi:al study); PREP (Preparation); USES
     (U. es)
        (target product; preparation of bicyclic nitrogenous fused ring compds. such
        as imidazopyrazines, as corti:otropin-releasing factor rec∈ptor
        antagonists)
IT
     44-273-43-4P, 8-Chloro-2-ethylin .dazo[1,2-a]pyrazine-3-carboxylic
     ac d methyl ester 446273-47-8P, -Bromo-2-ethyl-6-
     me hylimidazo[1,2-a]pyrazine-3-c rboxylic acid methyl ester
     446273-49-0P 446273-51-4P, 1-(8 hloro-2-
     et: ylimidazo[1,2-a]pyrazin-3-yl) outyl ethyl ether 446273-53-6P,
     1- 8-Chloro-2-ethylimidazo[1,2-a pyrazin-3-yl)-1-butanol
     44(273-55-8P, 1-(8-Chloro-2-eth) imidazo[1,2-a]pyrazin-3-yl)-1-
     bu anone 446273-71-8P, Ethyl 8-n :thoxy-2-
     (m: thylsulfanyl)imidazo[1,2-a]py azine-3-carboxylate 446273-72-9P
     , thyl 8-chloro-2-(methylsulfar 1)imidazo[1,2-a]pyrazine-3-carboxylate
     44:273-73-0P, tert-Butyl N-[8-ch.oro-2-(methylsulfanyl)imidazc[1,2-
     a]: yrazin-3-yl] carbamate 446273-'4-1P, N-[8-Chloro-2-
     (methylsulfanyl)imidazo[1,2-a]py azin-3-yl]-N-propylamine
     44:273-75-2P, N-[8-Chloro-2-(met ylsulfanyl)imidazo[1,2-a]pyrazin-
     3-1]-N,N-dipropylamine 446273-8'-6P, N-[8-(2,4-Dichloropheny])-
     2- thylimidazo[1,2-a]pyrazin-3-y.)-N,N-dipropylamine 446273-88-7P
        -[2-Ethyl-8-(2-methoxy-4,6-dinethylphenyl)imidazo[1,2-a]pyrazin-3-yl]-1-
     bu anone
     RL RCT (Reactant); SPN (Synthet c preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of bicyclic nitrogenous fused-ring compds. such
        as imidazopyrazines, as corti:otropin-releasing factor receptor
        antagonists)
RN
     44: 273-43-4 CAPLUS
CN
     Im dazo[1,2-a]pyrazine-3-carboxy ic acid, 8-chloro-2-ethyl-, methyl ester
     (9(I) (CA INDEX NAME)
       ( - OMe
RN
     44:273-47-8 CAPLUS
```

Im dazo[1,2-a]pyrazine-3-carboxy ic acid, 8-bromo-2-ethyl-6-methyl-,

me: hyl ester (9CI) (CA INDEX NA 4E)

CN

RN 446273-49-0 CAPLUS

CN Imidazo[1,2-1]pyrazine-3-carboxaldehyde, {-chloro-2-ethyl- (9CI) (CA INDEX NAME)

RN 446273-51-4 CAPLUS

CN Imidazo[1,2-1]pyrazine, 8-chloro-3-(1-ethcxybutyl)-2-ethyl- (9CI) (CA INDEX NAME)

RN 446273-53-6 CAPLUS

CN Imidazo[1,2-1]pyrazine-3-methanol, 8-chloro-2-ethyl-α-propyl- (9CI) (CA INDEX NA 4E)

RN 446273-55-8 CAPLUS

CN 1-Butanone, 1-(8-chloro-2-ethylimidazo[1,2-a]pyrazin-3-yl)- (9CI) (CA

INDE: NAME)

RN 4462 3-71-8 CAPLUS

CN Imid: zo[1,2-a]pyrazine-3-carboxyli acid, 8-methoxy-2-(methylthib)-, ethyl este: (9CI) (CA INDEX NAME)

RN 4462 3-72-9 CAPLUS

CN Imidazo[1,2-a]pyrazine-3-carboxylia acid, 8-chloro-2-(methylthio-, ethyl ester (9CI) (CA INDEX NAME)

RN 4462"3-73-0 CAPLUS

CN Carbanic acid, [8-chloro-2-(methyl-hio)imidazo[1,2-a]pyrazin-3-yl]-, 1,1-cimethylethyl ester (9CI) (CA INDEX NAME)

RN 446273-74-1 C PLUS

CN Imidazo[1,2-a].yrazin-3-amine, 8-chloro-2-(ethylthio)-N-propyl- (9CI) (CA INDEX NAME

RN 446273-75-2 CAPLUS

CN Imidazo[1,2-a]:yrazin-3-amine, 8-chloro-2-(:ethylthio)-N,N-dipropyl- (9Cl (CA INDEX NA'1E)

RN 446273-87-6 CAPLUS

CN Imidazo[1,2-a]:pyrazin-3-amine, 8-(2,4-dichlerophenyl)-2-ethyl-N,N-dipropy(9CI) (CA IN EX NAME)

RN 446273-88-7 CAPLUS

CN 1-Butanone, 1-2-ethyl-8-(2-methoxy-4,6-dimethylphenyl)imidazo[1,2-a]pyrazin-3-yl - (9CI) (CA INDEX NAME)

```
IT
     446274 · 02-8P, N-[8-(2-Bromo-4-methox phenyl) -2-
     (methy sulfanyl)imidazo[1,2-a]pyrazi:-3-yl]-N-cyclopropylmethyl-N-(3-
     fluoro; copyl) amine 446274-03-9P, N,N Dicyclopropylmethyl-N-[2-
     (methy sulfanyl)-8-(2,4,6-trimethoxy henyl)imidazo[1,2-a]pyrazin-3-
     yl]ami: = 446274-04-0P 446274-05-1P,
     N-Cycl oropylmethyl-N-isopropyl-N-[2 (methylsulfanyl)-8-(2,4,6-
     trimet: >xyphenyl)imidazo[1,2-a]pyraz n-3-yl]amine 446274-06-2P,
    N-Cycle propylmethyl-N-[8-(2,6-dimethexy-4-methylphenyl)-2-
     (methy sulfanyl)imidazo[1,2-a]pyrazi: -3-yl]-N-isobutylamine
     446274 · 37-3P, N-Cyclopropylmethyl-N- sobutyl-N-[8-(2-methoxy-4,6-
     dimeth lphenyl) -2-(methylsulfanyl) im dazo[1,2-a]pyrazin-3-yl] amine
     446274 · J8-4P, N-[8-(2-Chloro-4-metho: yphenyl) -2-
     (methy sulfanyl)imidazo[1,2-a]pyrazi: -3-yl]-N-cyclopropylmethyl-N-
     isobut lamine 446274-09-5P, N-Cyclop opylmethyl-N-[8-(4-methoxy-
     2,6-dir ethylphenyl) -2-(methylsulfany )imidazo[1,2-a]pyrazin-3-yl] - 1-
     propylanine 446274-10-8P, N-Cyclopro; ylmethyl-N-[8-(4-methoxy-2-
    methyl; nenyl) -2-(methylsulfanyl) imid zo[1,2-a]pyrazin-3-yl]-N-prop/lamine
     446274 · 11-9P, N-Cyclopropylmethyl-N- 8-(2-methoxy-4-methylphenyl) -
     2-(meth/lsulfanyl)imidazo[1,2-a]pyra:in-3-yl]-N-propylamine
     446274 · 12-0P, N-[8-(4-Chloro-2-metho.yphenyl)-2-
     (methy_sulfanyl)imidazo[1,2-a]pyrazi:-3-yl]-N-cyclopropylmethyl-N-
     propylanine 446274-13-1P, N-Cyclopro; ylmethyl-N-[8-(2,4-
     dimeth (yphenyl) -2- (methylsulfanyl) i idazo[1,2-a]pyrazin-3-yl]-N-
     propylanine 446274-14-2P, 4-[3-[(Cyc opropylmethyl)(propyl)amino
     ]-2-(methylsulfanyl)imidazo[1,2-a]py:azin-8-yl]-3-methylbenzonitri.e
     446274 - 15-3P, N-[8-(2-Chloro-4-metho: yphenyl) -2-
     (methy_sulfanyl)imidazo[1,2-a]pyrazi:-3-yl]-N-(1-ethylpropyl)amin∈
     446274 - 16-4P, N-(1-Ethylpropyl) -N-[8 (2-methoxy-4,6-
    dimethy lphenyl) -2-(methylsulfanyl) im dazo[1,2-a]pyrazin-3-yl] amine
     446274 · 17-5P, N-Cyclopropylmethyl-N- 8-(4-methyl-1,3-benzodioxol-5 ·
    yl)-2- methylsulfanyl)imidazo[1,2-a]; yrazin-3-yl]-N-propylamine
     446274 18-6P, N-Cyclopropylmethyl-N- 8-(5-methyl-2,3-dihydro-1,4-
    benzod: pxin-6-yl)-2-(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]-N-
    propylanine 446274-20-0P, N-Cyclopro; ylmethyl-N-[8-(2-methoxy-4-
     (triflupromethyl)phenyl]-2-(methylsu fanyl)imidazo[1,2-a]pyrazin-3-yl]-N-
    propylanine 446274-22-2P, N,N-Dicyclapropylmethyl-N-[8-(2-
    methoxy ·4-(trifluoromethyl)phenyl]-2 (methylsulfanyl)imidazo[1,2-a pyrazin-
    3-yl]amine 446274-23-3P, N,N-Dicyclo; ropylmethyl-N-[8-(4-methoxy-
    2-(trif luoromethyl) phenyl] -2-(methyl: ulfanyl) imidazo[1,2-a] pyrazin -3-
    yl]amir = 446274-24-4P, N,N-Dicycloprcpylmethyl-N-[8-(2,4-
    dimeth( cyphenyl) -2- (methylsulfanyl) ir idazo[1,2-a]pyrazin-3-yl]amin -3
     446274-25-5P 446274-26-6P, N, N-Dicyc. opropylmethyl-N-[8-
     (4-met) xy-2-methylphenyl) -2-(methyl: ulfanyl) imidazo[1,2-a]pyrazir 3-
    yl]amir = 446274-27-7P, N,N-Dicycloprcpylmethyl-N-[8-(2-methoxy-4-
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methylphenyl) -2- methylsulfanyl) imidazo[1,2-a] pyrazin-3-yl] amine
446274-28-8P, N- 8-(2-Chloro-4-(trifluorometh(xy)phenyl]-2-
(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]-N, N-
bis (cyclopropylm thyl) amine 446274-29-9P, N,N-
Dicyclopropylmet yl-N-[8-(2,4-dichlorophenyl) · 2-
(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]am:ne 446274-30-2P
446274-31-3P, 2- [8-(2-Chloro-4-methoxyphenyl) -2-
(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl](cyclopropylmethyl)amino]-1-
ethanol 446274-3 -4P 446274-33-5P 446274-34-6F
, N,N-Bis(cyclop opylmethyl)-8-[6-(dimethylamino)-4-methyl-3-pyridyl]-2-
(methylsulfanyl) midazo[1,2-a]pyrazin-3-amine 446274-35-7P,
N-[8-(2-Chloro-4 methoxyphenyl)-2-(methylsulfanyl)imidazo[1,2-a]pyrazin-3-
yl]-N-cyclopropy methyl-N-[3-(methylsulfanyl); ropyl]amine
446274-36-8P 446:74-37-9P, 1-[[8-(2-Chloro-4-
methoxyphenyl) - 2 (methylsulfanyl) imidazo [1,2-&]pyrazin-3-
yl] (cyclopropylm thyl) amino] - 2-propanol 446274 - 38 - 0P,
1-[[8-(2-Chloro- -(trifluoromethoxy)phenyl]-2-(methylsulfanyl)imidazo[1,2-
a]pyrazin-3-yl]( 'yclopropylmethyl)amino]-2-propanol 446274-39-1P
446274-40-4P 446::74-41-5P, 2-[[8-[2-Chloro-4-
(trifluoromethox ) phenyl] -2- (methylsulfanyl) imidazo[1,2-a] pyrazin-3-
yl] (cyclopropylm thyl) amino] acetamide 446274-42-6P
446274-43-7P 446 .74-44-8P 446274-45-9P,
N-[8-[2-Chloro-4 (trifluoromethoxy)phenyl]-2- methylsulfanyl)imidazo[1,2-
a]pyrazin-3-yl]- --cyclopropylmethyl-N-(2-furylmethyl)amine
446274-46-0P 446:74-48-2P 446274-49-3P,
N-[8-[2-Chloro-4 (trifluoromethoxy)phenyl]-2-(methylsulfanyl)imidazo[1,2-
a]pyrazin-3-yl]- --cyclopropylmethyl-N-(2-morpholinoethyl)amine
446274-50-6P 446 74-51-7P, N, N-Bis (cyclopropy) methyl) -8-
[4-(dimethylamin)-2-methoxyphenyl]-2-(methylsulfanyl)imidazo[1,2-
a]pyrazin-3-amin. 446274-53-9P, N-[8-(2-Chlorc-4-methoxyphenyl)-
2-(methylsulfiny )imidazo[1,2-a]pyrazin-3-yl]-N-cyclopropylmethyl-N-
propylamine 4462 4-55-1P, N-[8-(2-Chloro-4-methoxyphenyl)-2-
(methylsulfonyl) midazo[1,2-a]pyrazin-3-yl]-N-cyclopropylmethyl-N-
propylamine 4462'4-57-3P 446274-59-5P,
4-[3-[Di(cyclopr pylmethyl)amino]-2-(methylsu]fanyl)imidazo[1,2-a]pyrazin-
8-yl]-3-methoxyb nzonitrile 446274-61-9P, N,N-
Bis(cyclopropylm thyl)-N-[8-(2-methoxy-4-(pyrrolidin-1-yl)phenyl)-2-
(methylsulfanyl) midazo[1,2-a]pyrazin-3-yl]amine 446274-63-1P,
6-Chloro-3-(1-et oxybutyl)-2-ethyl-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[1,2-a]pyrazine 446274-65-3P,
8-(2-Chloro-4-me hoxyphenyl)-3-(1-ethoxybutyl)-2-
(methylsulfanyl) midazo[1,2-a]pyrazine 446274-67-5P,
3-(1-Ethoxybutyl -8-(2-methoxy-4,6-dimethylphenyl)-2-
(methylsulfanyl) midazo[1,2-a]pyrazine 446274-69-7P
446274-71-1P 446..74-75-5P 446274-77-7P
446274-78-8P, N- 8-(2-Chloro-4-methoxyphenyl)-2-methoxyimidazo[1,2-
a]pyrazin-3-yl]-"-cyclopropylmethyl-N-propylamine 446274-79-9P,
N-Cyclopropylmet yl-N-[2-methoxy-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[1,2-a]pyrazin-3-yl]-N-propylamine
446278-20-2P 446:78-22-4P
RL: PAC (Pharmac logical activity); SPN (Synthetic preparation); THU
(Therapeutic use ; BIOL (Biological study); PREP (Preparation); USES
   (preparation f bicyclic nitrogenous fused-ring compds. such as
   imidazopyrazi es, as corticotropin-releasing factor receptor
   antagonists)
446274-02-8 CAP US
Imidazo[1,2-a]py azin-3-amine, 8-(2-bromo-4-methoxyphenyl)-N-
(cyclopropylmeth 1)-N-(3-fluoropropyl)-2-(methylthio)- (9CI) (CA INDEX
NAME)
```

RN

CN

Br 
$$N$$
  $SMe$   $-N-CH_2$   $CH_2)_3-F$ 

RN 446274-03 9 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N,N-bis cyclopropylmethyl)-2-(methylt io)-8-(2,4,6-tr methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 446274-04 0 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, 8-(2-ch]pro-6-methoxy-4-methylphenyl) N,N-bis(cyclo:ropylmethyl)-2-(methylthio)- (9CI) (CA INDEX NAME)

RN 446274-05 1 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N-(cyclcoropylmethyl)-N-(1-methylethy )-2-

(methylthio) -8-(2, ,6-trimethoxyphenyl) - (9CI) (CA INDEX NAME)

RN 446274-06-2 CAPLU

CN Imidazo[1,2-a]pyra in-3-amine, N-(cyclopropylme nyl)-8-(2,6-dimethoxy-4-methylphenyl)-N-(2 methylpropyl)-2-(methylthio) (9CI) (CA INDEX NAME)

RN 446274-07-3 CAPLU.

CN Imidazo[1,2-a]pyra in-3-amine, N-(cyclopropylme 1yl)-8-(2-methoxy-4,6-dimethylphenyl)-N- 2-methylpropyl)-2-(methylthic - (9CI) (CA INDEX NAME)

RN 446274-08-4 CAPLU.

CN Imidazo[1,2-a]pyra: in-3-amine, 8-(2-chloro-4-met noxyphenyl)-N-(cyclopropylmethyl -N-(2-methylpropyl)-2-(methy.thio)-(9CI) (CA INDEX NAME)

C1 
$$Me$$

N  $Me$ 
 $V-CH_2$ 
 $i-u$ 

RN 446274-09-5 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, N-(cyclop: pylmethyl)-8-(4-methoxy-2,6-dimethylphe,yl)-2-(methylthio)-N-propyl- (9CI) (CA INDEX NAME)

RN 446274-10-8 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, N-(cyclop: pylmethyl)-8-(4-methoxy-2-methylpheny )-2-(methylthio)-N-propyl- (9:I) (CA INDEX NAME)

RN 446274-11-9 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, N-(cyclopropylmethyl)-8-(2-methoxy-4-methylpheny )-2-(methylthio)-N-propyl- (9:I) (CA INDEX NAME)

RN 446274-13-1 CAPLUS
CN Imidazo[1,2-a]pyrazi: -3-amine, N-(cyclopropylmethy:)-8-(2,4-dimethoxyphenyl)-2-(rethylthio)-N-propyl- (9CI) CA INDEX NAME)

RN 446274-14-2 CAPLUS
CN Benzonitrile, 4-[3-[cyclopropylmethyl)propylaminc -2(methylthio)imidazo[,2-a]pyrazin-8-yl]-3-methyl- (9CI) (CA INDEX NAME)

Me 
$$N \longrightarrow N \longrightarrow SM \epsilon$$
  $N \longrightarrow N \longrightarrow CH_2 \longrightarrow N \longrightarrow Pr$ 

RN 446274-15-3 CAPLUS
CN Imidazo[1,2-a] pyrazin-3-amine, 8-(2-chloro--methoxyphenyl)-N-(1-ethylpropyl)-2-(methylthio)- (9CI) (CA INC X NAME)

RN 446274-16-4 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(1-ethylp: pyl)-8-(2-methoxy-4,6-dimethylphenyl)-2-(methylthio)- (9CI) (CA NDEX NAME)

RN 446274-17-5 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, N-(cycloprop lmethyl)-8-(4-methyl-1,3-benzodioxol-5-/1)-2-(methylthio)-N-propyl- 9CI) (CA INDEX NAME)

RN 446274-18-6 CAPLUS
CN Imidazo[1,2-a]pyrazin- -amine, N-(cyclopropylmethyl) 8-(2,3-dihydro-5-methyl-1,4-benzodioxin 6-yl)-2-(methylthio)-N-propyl (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ N & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

RN 446274-20-0 CAPLUS
CN Imidazo[1,2-a]pyrazin-:-amine, N-(cyclopropylmethyl) 8-[2-methoxy-4-(trifluoromethyl)pheny']-2-(methylthio)-N-propyl- (901) (CA INDEX NAME)

RN 446274-22-2 CAF JUS

CN Imidazo[1,2-a]pyrazin-3-amine, N,N-bis(cyclop opylmethyl)-8-[2-methoxy-4-(trifluoromethyl)phenyl]-2-(methylthio)- (9Cl (CA INDEX NAME)

RN 446274-23-3 CAF JUS

CN Imidazo[1,2-a]pysazin-3-amine, N,N-bis(cyclop opylmethyl)-8-[4-methoxy-2-(trifluoromethyl-phenyl]-2-(methylthio)- (9Cl (CA INDEX NAME)

RN 446274-24-4 CAF JUS

CN Imidazo[1,2-a]py:azin-3-amine, N,N-bis(cyclop opylmethyl)-8-(2,4-dimethoxyphenyl)-2-(methylthio)- (9CI) (CA I DEX NAME)

N 446274-25-5 CAPLUS

N Imidazo[1,2-a]pyrazin-3-&mine, 8-(4-chloro-2-methoxyphenyl)-N,N-bis(cyclopropylmethyl)-2 (methylthio)- (9CI) (CA INDE: NAME)

N 446274-26-6 CAPLUS

N Imidazo[1,2-a]pyrazin-3-ε nine, N,N-bis(cyclopropylmeth; 1)-8-(4-methoxy-2-methylphenyl)-2-(methylth:0)- (9CI) (CA INDEX NAME)

RN 446274-27-7 CAPLU;

CN Imidazo[1,2-a]pyra:in-3-amine, N,N-bis(cyclopro ylmethyl)-8-(2-methoxy-4-methylphenyl)-2-(n:thylthio)- (9CI) (CA INDEX AME)

RN 446274-28-8 CAPLU;

CN Imidazo[1,2-a]pyra:in-3-amine, 8-[2-chloro-4-(t ifluoromethoxy)phenyl]-N,N-bis(cyclopropylmet iyl)-2-(methylthio)- (9CI) ( A INDEX NAME)

RN 446274-29-9 CAPLU;

CN Imidazo[1,2-a]pyra:in-3-amine, N,N-bis(cyclopro ylmethyl)-8-(2,4-dichlorophenyl)-2-(methylthio)- (9CI) (CA INDE NAME)

RN 446274-30-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-am. ie, 8-(2-bromo-4-methoxypheny.)-N,N-bis(cyclopropylmethyl)-2-(r:thylthio)- (9CI) (CA INDEX NAME)

RN 446274-31-3 CAPLUS

CN Ethanol, 2-[[8-(2-chloro-4 methoxyphenyl)-2-(methylthio):midazo[1,2-a]pyrazin-3-yl](cyclopropy methyl)amino]- (9CI) (CA INDE NAME)

RN 446274-32-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(2-chloro-4-methoxyphenyl)-N-(cyclobutylmethyl)-N-(cyclobropylmethyl)-2-(methylthio)- (9CI) (CA INDEX NAME)

RN 446274-33-5 CAPLUS
CN Imidazo[1,2-a]pyraz:n-3-amine, N,N-bis(cyclopropy methyl)-2-ethyl-8-[2-methoxy-4-(trifluorchethyl)phenyl]- (9CI) (CA IN EX NAME)

RN 446274-34-6 CAPLUS
CN Imidazo[1,2-a]pyraz: 1-3-amine, N,N-bis(cyclopropy methyl)-8-[6-(dimethylamino)-4-methyl-3-pyridinyl]-2-(methylth o)- (9CI) (CA INDEX NAME)

RN 146274-35-7 CAPLUS

CN [midazo[1,2-a]pyrazin-3-amine 8-(2-chloro-4-methoxyphenyl -N-(cyclopropylmethyl)-2-(methyl hio)-N-[3-(methylthio)propyl]- (9CI) (CA [NDEX NAME)

OMe
$$C1 \qquad SMe \qquad (CH_2)_3 - SMe$$

$$N \qquad CH_2 \qquad CH_2$$

RN 446274-36-8 CAPLUS

CN [midazo[1,2-a]pyrazin-3-amine 8-(2-chloro-4-methoxyphenyl)-N(cyclopropylmethyl)-2-(methyl hio)-N-(tetrahydro-2H-pyran-4-yl)- (9CI)
(CA INDEX NAME)

RN 446274-37-9 CAPLUS

CN 2-Propanol, 1-[[8-(2-chloro-4 methoxyphenyl)-2-(methylthio)imidazo[1,2-a]pyrazin-3-yl](cyclopropylme hyl)amino]- (9CI) (CA INDEX NAME)

RN 146274-38-0 CAPLUS

CN 2-Propanol, 1-[[8-[2-1 loro-4-(trifluoromethoxy)phe: /1]-2-(methylthio)imidazo[1 -a]pyrazin-3-yl](cyclopropyl: 2thyl)amino]- (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $SMe$ 
 $CH_2-C$ 
 $-Me$ 
 $N$ 
 $N$ 
 $C$ 
 $2$ 

RN 446274-39-1 CAPLUS
CN Imidazo[1,2-a]pyrazin -amine, 8-[2-chloro-4-(trifl: promethoxy)phenyl]-N(cyclopropylmethyl)-2 methylthio)-N-(tetrahydro-2H pyran-4-yl)- (9CI)
(CA INDEX NAME)

RN 446274-40-4 CAPLUS
CN Imidazo[1,2-a]pyrazin -amine, N,N-bis(cyclopropylmethyl)-8-[6-(dimethylamino)-2,4-dimethyl-3-pyridinyl]-2-(methylanio)- (9CI) (CA INDEX NAME)

RN 4.5274-41-5 CAPLUS
CN Acetamide, 2-[[8-[2-chloro-4-(t ifluoromethoxy)phenyl]-2(iethylthio)imidazo[1,2-a]pyraz n-3-yl](cyclopropylmethyl)am.no]- (9CI)
(CA INDEX NAME)

RN 4-5274-42-6 CAPLUS
CN II dazo[1,2-a]pyrazin-3-amine, -[2-chloro-4-(trifluorometho>/)phenyl]-N( -cyclopropylethyl)-N-(cyclopr pylmethyl)-2-(methylthio)- (5 II) (CA
II DEX NAME)

## F3C-

RN 445274-43-7 CAPLUS
CN Iridazo[1,2-a]pyrazin-3-amine, -(4-bromo-2-methoxyphenyl)-N, J-

bis(cyclopropylmethyl)-2 (methylthio)- (9CI) (CA INDE: NAME)

₹N 446274-44-8 CAPLUS

2-Furancarboxamide, N-[8 [2-chloro-4-(trifluoromethoxy phenyl]-2-(methylthio)imidazo[1,2-)pyrazin-3-yl]- (9CI) (CA IN EX NAME)

UN 446274-45-9 CAPLUS

Imidazo[1,2-a]pyrazin-3- mine, 8-[2-chloro-4-(trifluor methoxy)phenyl]-N(cyclopropylmethyl)-N-(2 furanylmethyl)-2-(methylthio) (9CI) (CA INDEX NAME)

$$F_3C-O$$

$$N$$

$$N$$

$$N$$

$$CH_2$$

$$CH_2$$

RN 446 74-46-0 CAPLUS

CN Imi:azo[1,2-a]pyrazin-3-amine, N- 2-bromoethyl)-8-[2-chloro-4-(tr fluoromethoxy)phenyl]-N-(cycl propylmethyl)-2-(methylthio) (9CI) (CA IND X NAME)

F<sub>3</sub>C-O

Cl

N

SMe

$$CH_2-CH_2Br$$

N

 $CH_2$ 
 $CH_2$ 

RN 446: 74-48-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8- 2-chloro-4-(trifluoromethoxy-)henyl]-N-(cyclopropylmethyl)-2-(methylthio -N-[2-(1-pyrrolidinyl)ethyl] (9CI) (CA IND::X NAME)

RN 446.74-49-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8- 2-chloro-4-(trifluoromethoxy, henyl]-N-(cyclopropylmethyl)-2-(methylthio -N-[2-(4-morpholinyl)ethyl]- 9CI) (CA INDIX NAME)

- Ri 446274-50-6 CAPLUS
- C! Imidazo[1,2-a]pyrazin-3-am ne, 8-[2-chloro-4-(trifluorom-thoxy)phenyl]-N(cyclopropylmethyl)-2-(met ylthio)-N-[2-(1H-pyrazol-1-yl ethyl]- (9CI)
  (CA INDEX NAME)

C 
$$N \longrightarrow N$$
 SMe  $N \longrightarrow N \longrightarrow N$   $N \longrightarrow N \longrightarrow N$   $N \longrightarrow N \longrightarrow N$ 

- R: 446274-51-7 CAPLUS
- C! Imidazo[1,2-a]pyrazin-3-am ne, N,N-bis(cyclopropylmethyl -8-[4-(dimethylamino)-2-methoxyp enyl]-2-(methylthio)- (9CI) CA INDEX NAME)

RN 446274 53-9 CAPLUS

CN Imida: [1,2-a]pyrazin-3-amine, 8-(2 chloro-4-methoxyphenyl)-N-(cyclc ropylmethyl)-2-(methylsulfin;l)-N-propyl- (9CI) (CA INDEX NAME)

RN 446274 55-1 CAPLUS

CN Imida: [1,2-a]pyrazin-3-amine, 8-(2 chloro-4-methoxyphenyl)-N(cyclc ropylmethyl)-2-(methylsulfon i)-N-propyl- (9CI) (CA INDE) NAME)

RN 446274 57-3 CAPLUS

CN Imidaz [1,2-a]pyrazin-3-amine, 8-[2 chloro-4-(methylsulfinyl)phen l]-N-(cyclc ropylmethyl)-2-(methylsulfinyl)-N-propyl- (9CI) (CA INDEX NAME)

RN 446274-59-5 CAPLUS

CN Benzonitrile, 4-[3-[(cyclopropylmethyl)amino]-2-(methylthib)imidazo[1,2-a]pyrazin-8-yl]-3-methoxy-(CI) (CA INDEX NAME)

RN 446274-61-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amin:, N,N-bis(cyclopropylmethyl)-,-[2-methoxy-4-(1-pyrrolidinyl)phenyl]-2-(m:thylthio)-(9CI) (CA INDEX N ME)

RN 446274-63-1 CAPLUS

CN Imidazo ,2-a]pyrazine, 6-chloro-3-(1 :thoxybutyl)-2-ethyl-8-(2-met oxy-4,6-dime hylphenyl)- (9CI) (CA INDEX JAME)

RN  $446274-\epsilon$  -3 CAPLUS

CN Imidazoi, 2-a]pyrazine, 8-(2-chloro-4 nethoxyphenyl)-3-(1-ethoxybut l)-2-(methylt io)- (9CI) (CA INDEX NAME)

RN 446274-6 -5 CAPLUS
CN Imidazo( ,2-a]pyrazine, 3-(1-ethoxybut /1)-8-(2-methoxy-4,6-dimethyl henyl)-2-(methy thio)- (9CI) (CA INDEX NAME)

RN 446274-6 -7 CAPLUS

CN Butanone, 1-[8-(2-chloro-4-m:thoxyphenyl)-2-ethylimidazo[1 2-a]pyrazin-3y]-, O-methyloxime, (1E)- (9C) (CA INDEX NAME)

Double bond geometry as shown.

RN 4 .6274-71-1 CAPLUS

CN Butanone, 1-[8-(2-chloro-4-methoxyphenyl)-2-ethylimidazo[1 2-a]pyrazin-3-} ]-, O-methyloxime, (1Z)- (9C) (CA INDEX NAME)

Double bond geometry as shown.

RN 4:6274-75-5 CAPLUS

CN | Butanone, 1-[8-(2-methoxy-4, 6-dimethylphenyl)-2-(methylthic)imidazo[1,2-

a pyrazin-3-yl]-, O-methyloxime, (1E)- (9CI) (CA INDEX NAME

Double bond geometry as shown.

RN 446274-77- CAPLUS

CN 1-Butanone 1-[8-(2-methoxy-4,6-dimethy henyl)-2-(methylthio)imidazo 1,2-a]pyrazin--yl]-, O-methyloxime, (1Z)- +CI) (CA INDEX NAME)

Double bond geo etry as shown.

RN 446274-78- CAPLUS

CN Imidazo[1, -a]pyrazin-3-amine, 8-(2-chlc o-4-methoxyphenyl)-N-(cycloprop lmethyl)-2-methoxy-N-propyl- 9CI) (CA INDEX NAME)

RN 446 74-79-9 CAPLUS
CN Imi azo[1,2-a]pyrazin-3-amine, N- cyclopropylmethyl)-2-methoxy 8-(2-met oxy-4,6-dimethylphenyl)-N-propyl- (9CI) (CA INDEX NAME)

RN 446 78-20-2 CAPLUS
CN 1-E tanone, 1-[8-(2-chloro-4-meth.exyphenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl], oxime, (1Z)- (9CI) (CA INL:X NAME)

Double b nd geometry as shown.

RN 446 78-22-4 CAPLUS
CN 1-B tanone, 1-[8-(2-chloro-4-meth exphenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl], oxime, (1E)- (9CI) (CA INC X NAME)

Double b nd geometry as shown.

RN 446274-01-7 CAPLUS
CN Imidazo[1,2-; ipyrazine, 8-(2,4-dichlorophe yl)-2-methyl- (9CI) (CA IND: (NAME)

IT 391954-04-4P 1-[8-(2,4-Dichlorophenyl)-2-:thylimidazo[1,2a]pyrazin-3-:t]butyl ethyl ether 446270-84-4P,
8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-i]pyrazine-3-carboxylic acid
methyl ester 446270-85-5P, tert-Butyl N-[8 (2,4-dichlorophenyl)2-ethylimida: >[1,2-a]pyrazin-3-yl]carbamat : 446270-87-7P,
N-[8-(2,4-Dichlorophenyl)-2-ethylimidazo[1,2-a]pyrazin-3-yl]-N-propylam ne
446270-88-8P 446270-89-9P, 6-Chloro-8-(2,4)

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dichl rophenyl)-2-ethylimidazo[1,2 | ]pyrazine-3-carboxylic acid ethyl
ester 446270-90-2P, tert-Butyl N-{(chloro-8-(2,4-
dichl rophenyl)-2-ethylimidazo[1,2-1]pyrazin-3-yl]carbamate
44627 -91-3P, N-[6-Chloro-8-(2,4-d.:hlorophenyl)-2-
ethyl midazo[1,2-a]pyrazin-3-yl]-N propylamine 446270-92-4P,
N-[6- hloro-8-(2,4-dichlorophenyl) !-ethylimidazo[1,2-a]pyrazin -yl]-N,N-
dipro ylamine 446270-93-5P, 8-(2,4 )ichlorophenyl)-2-ethyl-6-
methy imidazo[1,2-a]pyrazine-3-car! xylic acid methyl ester
44627 -94-6P, tert-Butyl N-[8-(2,4 lichlorophenyl)-2-ethyl-6-
methy imidazo[1,2-a]pyrazin-3-yl]carbamate 446270-95-7P,
N-[8-2,4-Dichlorophenyl)-2-ethyl-(methylimidazo[1,2-a]pyrazin-yl]-N-
propy amine 446270-96-8P 446270-97-3P,
8-(2, -Dichlorophenyl)-2-methyl-3-1 troimidazo[1,2-a]pyrazine
44627 -98-0P, 8-(2,4-Dichlorophenyl -2-methylimidazo[1,2-
a)pyr zine-3-amine 446270-99-1P 446?71-00-7P,
N-[8-2,4-Dichlorophenyl)-2-methyl: midazo[1,2-a]pyrazin-3-yl]-N-1-
ethyl ropyl)amine 446271-01-8P 4462/1-02-9P,
N-[8-2,4-Dichlorophenyl]-2-ethylin dazo[1,2-a]pyrazin-3-yl]-N-(-
ethyl ropyl)amine hydrochloride 446271-04-1P
44627'-06-3P 446271-08-5P 446271-10-9P
44627 -12-1P 446271-14-3P 446271-16-5P
44627.-18-7P 446271-20-1P, N-[6-Ch] >ro-8-(2-chloro-4-
metho yphenyl)-2-ethylimidazo[1,2-a pyrazin-3-yl]-N,N-dipropylam ne
44627 -22-3P, 3-Chloro-4-[6-chloro-3-(dipropylamino)-2-
ethyl midazo[1,2-a]pyrazin-8-yl]ber conitrile 446271-24-5P,
N-[8-2,6-Dimethoxy-4-methylphenyl) 2-ethylimidazo[1,2-a]pyrazir 3-yl]-N,N-
dipro ylamine 446271-30-3P, N-[8-(4-Chlorophenyl)-2-
ethyl midazo[1,2-a]pyrazin-3-yl]-N, I-dipropylamine 446271-32-5P,
N-[2- thyl-8-(4-methoxyphenyl)imida:o[1,2-a]pyrazin-3-yl]-N,N-
dipro ylamine 446271-34-7P, N-[2-Et 1yl-8-(2-methoxy-4,6-
dimet ylphenyl)imidazo[1,2-a]pyrazi 1-3-yl]-N,N-dipropylamine
44627 -35-8P, N-Cyclopropylmethyl-N [2-Ethyl-8-(2-methoxy-4,6-
dimet ylphenyl)imidazo[1,2-a]pyrazi i-3-yl]-N-isobutylamine
44627 -37-0P, N-[2-Ethyl-6-methoxy-3-(2-methoxy-4,6-
dimet ylphenyl)imidazo[1,2-a]pyrazi 1-3-yl]-N,N-dipropylamine
44627 -38-1P, N-[8-(2,6-Dimethoxy-3 pyridyl)-2-ethylimidazo[1,2-
a]pyr zin-3-yl]-N, N-dipropylamine 4 & 6271-39-2P,
N-[2- thyl-8-(6-methoxy-2-methyl-3-)yridyl)imidazo[1,2-a]pyrazin 3-yl]-N,N-
dipro ylamine 446271-41-6P 446271-43-8P,
N-[2-thyl-8-(2,4,6-trimethyl-3-pyl-dyl)imidazo[1,2-a]pyrazin-3-l]-N,N-
dipro ylamine 446271-45-0P, N-[2-Et 1yl-8-(3-methyl-2-
pyrid 1)imidazo[1,2-a]pyrazin-3-y1) N,N-dipropylamine 446271-47- P
, N-[ -Ethyl-8-(6-methoxy-2,4-dimet yl-3-pyridyl)imidazo[1,2-a]p razin-3-
yl]-N N-dipropylamine 446271-49-4P, N-[2-Ethyl-8-(6-methyl-1,3-
benzo ioxol-5-yl)imidazo[1,2-a]pyra:in-3-yl]-N,N-dipropylamine
44627 - -53-0P, N-[2-Ethyl-8-(4-methoxy-2,5-
dimet ylphenyl)imidazo[1,2-a]pyrazi 1-3-yl]-N,N-dipropylamine
44627.-55-2P, N-[8-(2,4-Dichlorophe yl)-2-ethylimidazo[1,2-
a]pyr zin-3-yl]-N-isobutyl-N-propy] mine 446271-57-4P,
N-Cyc opropylmethyl-N-[8-(2,4-dich])rophenyl)-2-ethylimidazo[1,2 a]pyrazin-
3-yl] N-propylamine 446271-59-6P, N [8-(2,4-Dichlorophenyl)-2-
ethyl midazo[1,2-a]pyrazin-3-yl]-N-(3-fluoropropyl)-N-propylamin
44627.-61-0P, N-Cyclopropylmethyl-N [8-(2,4-dichlorophenyl)-2-
ethyl midazo[1,2-a]pyrazin-3-yl]-N- sobutylamine 446271-63-2P
44627: -65-4P, N-[8-(2,4-Dichlorophe yl)-2-ethylimidazo[1,2-
a]pyr zin-3-yl]-N-isobutylamine 446271-66-5P,
N-[8-2,4-Dichlorophenyl)-2-ethylim:dazo[1,2-a]pyrazin-3-yl]-N-e hyl-N-
isobu ylamine 446271-68-7P, N-Butyl N-[8-(2,4-dichlorophenyl)-2-
ethyl midazo[1,2-a]pyrazin-3-yl]-N-sobutylamine 446271-70-1P,
N-Ben yl-N-[8-(2,4-dichlorophenyl)-:-ethylimidazo[1,2-a]pyrazin--yl]-N-
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isobutylamine 446271-72-3P, N-[8-(2,4-Dichle ophenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-isobutyl :-(2-thienylmethyl)amine
446271-74-5P, -[8-(2,4-Dichlorophenyl)-2-e: ylimidazo[1,2-
a]pyrazin-3-yl -N-(2-furylmethyl)-N-isobuty mine 446271-76-7P,
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-isobutyl-N
isopentylamine 446271-78-9P, N-[8-(2,4-Dich: rophenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-isobutyl :-[3-
(methylsulfany )propyl]amine 446271-80-3P, 1 [8-(2,4-
Dichlorophenyl -2-ethylimidazo[1,2-a]pyrazi: 3-yl]-N-isobutyl-N-
pentylamine 44:271-81-4P, N-Cyclohexylmethy: N-[8-(2,4-
dichlorophenyl -2-ethylimidazo[1,2-a]pyrazi: 3-yl]-N-isobutylamine
446271-82-5P, :-[8-(2,4-Dichlorophenyl)-2-et ylimidazo[1,2-
a)pyrazin-3-yl -N-(3-fluoropropyl)amine 4462 1-84-7P,
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-ethyl-N-(3
fluoropropyl) ar ine 446271-85-8P, N-Butyl-N- (-(2,4-
dichlorophenyl -2-ethylimidazo[1,2-a]pyrazi: 3-yl]-N-(3-fluoropropyl)amin-
446271-87-0P, !-Benzyl-N-[8-(2,4-dichlorophe yl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-(3-fluorc ropyl)amine
446271-88-1P, !-[8-(2,4-Dichlorophenyl)-2-et .ylimidazo[1,2-
a]pyrazin-3-yl -N-(3-fluoropropyl)-N-(2-thi\epsilon ylmethyl)amine
446271-89-2P, 1-[8-(2,4-Dichlorophenyl)-2-et ylimidazo[1,2-
a]pyrazin-3-yl -N-(3-fluoropropyl)-N-(2-fury methyl)amine
446271-90-5P, :-[8-(2,4-Dichlorophenyl)-2-et ylimidazo[1,2-
a]pyrazin-3-yl -N-(3-fluoropropyl)-N-isopent lamine 446271-91-6P
, N-[8-(2,4-Di nlorophenyl)-2-ethylimidazo[1 2-a]pyrazin-3-yl]-N-(3-
fluoropropyl) -: -[3-(methylsulfanyl)propyl] an ne 446271-92-7P,
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-(3-
fluoropropyl) -: -pentylamine 446271-93-8P, N 'yclohexylmethyl-N-
[8-(2,4-\text{dichlo phenyl})-2-\text{ethylimidazo}[1,2-\epsilon \text{ pyrazin-3-yl}]-N-(3-
fluoropropyl) ar ine 446271-94-9P, N-[8-(2,4-I chlorophenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-(3-fluorc ropyl)-N-(4,4,4-
trifluorobutyl amine 446271-95-0P, N-Cyclopy pylmethyl-N-[8-(2,4-
dichlorophenyl -2-ethylimidazo[1,2-a]pyrazir 3-yl]-N-(3-fluoropropyl)amin
446271-96-1P, !-[8-(2,4-Dichlorophenyl)-2-et ylimidazo[1,2-
a]pyrazin-3-yl -N-(3-fluoropropyl)-N-isobut; amine 446271-97-2P,
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-isobutyl-N
(4,4,4-trifluo. butyl) amine 446271-98-3P, N. 8-(2,4-
Dichlorophenyl -2-ethylimidazo[1,2-a]pyrazir 3-yl]-N-isopentylamine
446271-99-4P, !-[8-(2,4-Dichlorophenyl)-2-et .ylimidazo[1,2-
a]pyrazin-3-yl -N-ethyl-N-isopentylamine 446.72-00-0P,
N-Butyl-N-[8-(:,4-dichlorophenyl)-2-ethylim: azo[1,2-a]pyrazin-3-yl]-N-
isopentylamine 446272-01-1P, N-[8-(2,4-Dich] rophenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-isopentyl N-(2-thienylmethyl)amine
446272-02-2P, !-[8-(2,4-Dichlorophenyl)-2-et :ylimidazo[1,2-
a]pyrazin-3-yl.-N, N-diisopentylamine 446272-13-3P,
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-isopentyl-
[3-(methylsulfanyl)propyl]amine 446272-04-4P
N-[8-(2,4-Dich prophenyl)-2-ethylimidazo[1,2 a]pyrazin-3-yl]-N-isopentyl-1
pentylamine 446272-05-5P 446272-06-6P,
N-Cyclopropylm: thyl-N-[8-(2,4-dichlorophenyl -2-ethylimidazo[1,2-a]pyrazi:
3-y1]-N-isopen: /lamine 446272-07-7P, N-[8-(2 4-Dichlorophenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N-isopentyl N-propylamine
446272-08-8P, 1-[8-(4-Chloro-2-methoxypheny] -2-ethylimidazo[1,2-
a]pyrazin-3-yl]-N, N-dipropylamine 446272-09- P,
N-[8-(4-Bromo-: -chlorophenyl)-2-ethylimidazc 1,2-a]pyrazin-3-yl]-N,N-
dipropylamine 446272-10-2P, N-[8-(2,4-Dibromphenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N,N-dipropy amine 446272-11-3P,
N-[8-(4-Bromo-: -fluorophenyl)-2-ethylimidazc 1,2-a]pyrazin-3-yl]-N,N-
dipropylamine 446272-12-4P, N-[8-(2-Bromo-4-lethoxyphenyl)-2-
ethylimidazo[1 2-a]pyrazin-3-yl]-N,N-dipropy amine 446272-13-5P,
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N-(sec-Fatyl)-N-[8-(2,4-dichloropheny)-2-ethylimidazo[1,2-a]pyraz n-3-yl]-
N-propy amine 446272-14-6P, N-(sec-B, yl)-N-cyclopropylmethyl-N-
[8-(2,4-dichlorophenyl)-2-ethylimida; [1,2-a]pyrazin-3-yl]amine
446272-15-7P, N-Butyl-N-(sec-butyl)-! [8-(2,4-dichlorophenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]amine 446272-16-8P,
N-(sec-Fatyl)-N-[8-(2,4-dichloropheny)-2-ethylimidazo[1,2-a]pyraz n-3-yl]-
N-isobut ylamine 446272-17-9P 446272-1:-0P
446272-19-1P, N-[8-(2,6-Dimethoxy-4-m-thylphenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N,N-!iisobutylamine 446272-20-4P
, N-[8-(2-Chloro-4-methoxyphenyl)-2-@ hylimidazo[1,2-a]pyrazin-3-y }-N,N-
diisobut /lamine 446272-21-5P, N-[2-Et yl-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[1,2-a]pyrazin -yl]-N,N-diisobutylamine
446272-22-6P 446272-23-7P, N-Butyl-N 8-(2-chloro-4-
methoxyrhenyl) -2-ethylimidazo[1,2-a]r razin-3-yl]-N-isobutylamine
446272-24-8P 446272-25-9P, N-Butyl-N- 8-(2,6-dimethoxy-4-
methylphenyl)-2-ethylimidazo[1,2-a]py azin-3-yl]-N-isobutylamine
446272-26-0P, N-Butyl-N-[2-ethyl-8-(2 methoxy-4,6-
dimethylohenyl)imidazo[1,2-a]pyrazin -yl]-N-isobutylamine
446272-27-1P, N-[8-(2-Chloro-4-metho) phenyl)-2-ethylimidazo[1,2-
a]pyrazin-3-yl]-N-cyclopropylmethyl-N isobutylamine 446272-28-2P
, N-Cyclopropylmethyl-N-[8-(2,6-dimet toxy-4-methylphenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N-is butylamine 446272-29-3P
446272-30-6P 446272-31-7P, 8-(2,4-Dic lorophenyl)-3-
(dipropylamino) -2-ethylimidazo[1,2-a] yrazin-6-yl cyanide
446272-32-8P 446272-33-9P 446272-34-C
446272-35-1P, 3-(1-Ethoxybutyl)-2-etl 1-8-(2-methoxy-4,6-
dimethylphenyl)imidazo[1,2-a]pyrazin∈ 446272-36-2P,
8-(2,4-Limethoxy-6-methylphenyl)-3-(1 ethoxybutyl)-2-ethylimidazo[,2-
a]pyrazine 446272-37-3P, 8-(2,6-Dimet .oxy-4-methylphenyl)-3-(1-
ethoxybutyl)-2-ethylimidazo[1,2-a]pyr zine 446272-38-4P,
8-(2-Chloro-4-methoxyphenyl)-3-(1-ethoxybutyl)-2-ethylimidazo[1,2-
a]pyrazine 446272-39-5P, 4-[2-Ethyl-8 (2-methoxy-4,6-
dimethylphenyl)imidazo[1,2-a]pyrazin -yl]-4-heptanol 446272-40-8P
446272-41-9P 446272-42-0P 446272-43-1
446272-44-2P, 8-(2,4-Dimethoxyphenyl) 2-ethyl-3-(1-
ethylpropyl)imidazo[1,2-a]pyrazine 44,272-52-2P,
N, N-Dipi ppyl-8-(2,4-dichlorophenyl)-1 (methylsulfanyl)imidazo[1,2-
a]pyrazin-3-amine 446272-53-3P 446272 54-4P,
N-[8-(2,4-Dichloro-6-methylphenyl)-2·thylimidazo[1,2-a]pyrazin-3-1]-N,N-
dipropylamine 446272-55-5P 446272-56- P,
N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl)-2-et .ylimidazo[1,2-a]pyrazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenyl]-2-et .ylimidazin-3-yl -N,N-[8-(2-3romo-4-isopropylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylphenylp
dipropy] amine 446272-57-7P, N-[8-(2-E omo-6-methoxy-4-
methylphenyl) -2-ethylimidazo[1,2-a]py azin-3-yl]-N,N-dipropylamine
446272-58-8P, N-[8-(2-Bromo-4,6-dimet :ylphenyl)-2-ethylimidazo[1,2
a]pyrazia-3-yl]-N, N-dipropylamine 446:72-59-9P,
N-[8-(2,4-Dimethylphenyl)-2-ethylimic zo[1,2-a]pyrazin-3-yl]-N,N-
dipropylamine 446272-60-2P, N-[8-(2-C loro-4-methylphenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N,N-!ipropylamine 446272-61-3P,
N-[8-(2-Chloro-6-methoxy-4-methylpher. 1)-2-ethylimidazo[1,2-a]pyra in-3-
yl]-N, N-dipropylamine 446272-62-4P 44-272-63-5P,
N-[8-(2-Chloro-4,6-dimethylphenyl)-2-thylimidazo[1,2-a]pyrazin-3-l]-N,N-
dipropylamine 446272-64-6P, N-Cyclopropylmethyl-N-[8-(2,4-
dichlorophenyl)-2-ethylimidazo[1,2-a] yrazin-3-yl]-N-(2-methoxyeth l)amine
hydrochloride 446272-65-7P, N-[8-(2,4 Dichlorophenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N-(2 methoxyethyl)amine
446272-66-8P, N-[8-(2,4-Dichloropheny )-2-ethylimidazo[1,2-
a]pyrazin-3-yl]-N-(2-methoxyethyl)-N-propylamine 446272-67-9P,
N-Butyl-N-[8-(2,4-dichlorophenyl)-2-\epsilon hylimidazo[1,2-a]pyrazin-3-y |-N-(2-
methoxyethyl)amine 446272-68-0P, N-[8 (2,4-Dichlorophenyl)-2-
ethylimidazo[1,2-a]pyrazin-3-yl]-N-(2 methoxyethyl)-N-pentylamine
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446272-69-1P, N- 3-(2,4-Dichlorophenyl)-2-eth; imidazo[1,2-
a]pyrazin-3-yl]-: isobutyl-N-(2-methoxyethyl)\epsilon ine 446272-70-4P,
N-Cyclopropylmet /1-N-[8-(2,4-dichlorophenyl) - -ethylimidazo[1,2-a]pyrazin-
3-yl]-N-(2-methy outyl)amine 446272-71-5P, N- -(2,4-
Dichlorophenyl) - ethylimidazo[1,2-a]pyrazin-3 yl]-N-isobutyl-N-(2-
methylbutyl)amin: 446272-72-6P, N-Cyclobutylme hyl-N-
cyclopropylmethy N-[8-(2,4-dichlorophenyl)-2-thylimidazo[1,2-a]pyrazin-3-
yl]amine 446272-3-7P, N-Cyclobutylmethyl-N-[8 (2,4-
dichlorophenyl) - : ethylimidazo[1,2-a]pyrazin-3 yl]-N-propylamine
446272-74-8P, N- /clobutylmethyl-N-[8-(2,4-dic lorophenyl)-2-
ethylimidazo[1,2 1]pyrazin-3-yl]-N-isobutylami e 446272-75-9P,
N-[8-(2,4-Dichlo: >phenyl)-2-ethylimidazo[1,2-a pyrazin-3-yl]-N-(4-
fluorobutyl)-N-p: pylamine 446272-76-0P, N-Cyc opropylmethyl-N-
[8-(2,4-dichloro; nenyl)-2-ethylimidazo[1,2-a]r razin-3-yl]-N-(4-
fluorobutyl)amin: 446272-77-1P, N-[8-(2,4-Dich orophenyl)-2-
ethylimidazo[1,2 i]pyrazin-3-yl]-N-(4-fluorobu yl)-N-isobutylamine
446272-78-2P 446272-79-3P 446272-80-6P,
3-[[8-(2,4-Dichle cophenyl)-2-ethylimidazo[1,2-]pyrazin-3-
yl] (propyl) amino ropanenitrile 446272-81-7P
446272-82-8P, N-1 ityl N-cyclobutylmethyl-N-[8- 2,4-dichlorophenyl)-
2-ethylimidazo[1,2-a]pyrazin-3-yl]amine 446272 83-9P,
N-Butyl-N-cyclop. pylmethyl-N-[8-(2,4-dichlorc henyl)-2-ethylimidazo[1,2-
a]pyrazin-3-yl]a: ne 446272-84-0P, N-Butyl-N-[ -(2-chloro-6-
methoxy-4-methyl; nenyl)-2-ethylimidazo[1,2-a]p razin-3-yl]-N-isobutylamine
446272-85-1P 446172-86-2P, N,N-Dicyclopropylme hyl-N-[8-
(2,6-dimethoxy-4 methylphenyl)-2-ethylimidazo[ ,2-a]pyrazin-3-yl]amine
446272-87-3P 4462/2-88-4P, N,N-Dicyclopropylme hyl-N-[2-
ethyl-8-(2-metho: /-4,6-dimethylphenyl)imidazo[ ,2-a]pyrazin-3-yl]amine
446272-89-5P, N- 3-(2-Chloro-6-methoxy-4-methy phenyl)-2-
ethylimidazo[1,2 1]pyrazin-3-yl]-N-cyclopropy] ethyl-N-(2-
methylbutyl)amine 446272-90-8P, N-Cyclopropylm thyl-N-[8-(2,6-
dimethoxy-4-methy lphenyl)-2-ethylimidazo[1,2-a pyrazin-3-yl]-N-(2-
methylbutyl)amin: 446272-91-9P, N-[8-(2-Chlorc 4-methoxyphenyl)-
2-ethylimidazo[1 ?-a]pyrazin-3-yl]-N-cycloprop lmethyl-N-(2-
methylbutyl)amine 446272-92-0P, N-Cyclopropylm thyl-N-[2-ethyl-8-
(2-methoxy-4,6-d nethylphenyl)imidazo[1,2-a]py azin-3-yl]-N-(2-
methylbutyl)amine 446272-93-1P, N-[8-(2-Chlorc 6-methoxy-4-
methylphenyl) -2-6 :hylimidazo[1,2-a]pyrazin-3-y ]-N-cyclopropylmethyl-N-
propylamine 446272-94-2P, N-Cyclopropylmethyl- -[8-(2,6-
dimethoxy-4-methy phenyl)-2-ethylimidazo[1,2-a pyrazin-3-yl]-N-propylamine
446272-95-3P, N- 3-(2-Chloro-4-methoxyphenyl) - -ethylimidazo[1,2-
a]pyrazin-3-yl]-: cyclopropylmethyl-N-propylam ne 446272-96-4P,
N-Cyclopropylmet / l-N-[2-ethyl-8-(2-methoxy-4, -dimethylphenyl)imidazo[1,2-
a]pyrazin-3-yl]-1 -propylamine 446272-97-5P, N- 8-(2-Chloro-6-
methoxy-4-methyl; nenyl)-2-ethylimidazo[1,2-a]p razin-3-yl]-N,N-
diisobutylamine 416272-98-6P, N-[8-(2-Chloro-6 methoxy-4-
methylphenyl) -2-ethylimidazo[1,2-a]pyrazin-3-y]-N-cyclopropylmethyl-N-
isobutylamine 446272-99-7P, N-[8-(2-Chloro-4-m thoxyphenyl)-2-
ethylimidazo[1,2 ]pyrazin-3-yl]-N-(3-fluoropr pyl)-N-propylamine
446273-00-3P, N- 3-(2-Chloro-6-methoxy-4-methy phenyl)-2-
ethylimidazo[1,2 1]pyrazin-3-yl]-N-(3-fluoropr pyl)-N-propylamine
446273-01-4P, N,1 Dicyclopropylmethyl-N-[8-(2, -dibromophenyl)-2-
ethylimidazo[1,2 1]pyrazin-3-yl]amine 446273-0 -5P
446273-03-6P 4462/3-04-7P, N, N-Dicyclopropylme hyl-N-[8-
(2,4-dichloro-6-rethoxyphenyl)-2-ethylimidazo[,2-a]pyrazin-3-yl]amine
446273-05-8P, N- 3-(2-Bromo-4,6-dimethylphenyl -2-ethylimidazo[1,2-
a]pyrazin-3-yl]-1 cyclopropylmethyl-N-propylam ne 446273-06-9P,
N-[8-(2,4-Dibrom >henyl)-2-ethylimidazo[1,2-a] yrazin-3-yl]-N,N-
diisobutylamine 446273-07-0P 446273-08-1P
446273-09-2P 4462/3-10-5P 446273-11-6P,
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N-[8-(2,4 Dichlorophenyl)-2-ethyl-6-met oxyimidazo[1,2-a]pyrazin-3-y -N,N-
     dipropylar ne 446273-12-7P, N-[6-Chlorc 2-ethyl-8-(2-methoxy-4,6-
     dimethylplenyl)imidazo[1,2-a]pyrazin-3-1]-N,N-dipropylamine
     446273-13-3P 446273-14-9P, N-[6-Chloro-ethyl-8-(2-
     methoxy-4 3-dimethylphenyl)imidazo[1,2 ]pyrazin-3-yl]-N-cyclopropyl thyl-
     N-propylar ne 446273-15-0P, N-[6-Chlorc 2-ethyl-8-(2-methoxy-4,6-dimethylp] enyl) imidazo[1,2-a]pyrazin-3 l]-N-cyclopropylmethyl-N-(3-fluoropropyl) amine 446273-16-1P, N-[6-C loro-8-(2-chloro-4-
     methoxyphe y1)-2-ethylimidazo[1,2-a]pyr zin-3-yl]-N-cyclopropylmethy N-(3-fluoropro;/l)amine 446273-17-2P, N-[6-C loro-8-(2-chloro-4-
     methoxyphe yl)-2-ethylimidazo[1,2-a]pyr zin-3-yl]-N-(3-fluoropropyl) propylamir: 446273-18-3P, N-[6-Chloro-8 (2-chloro-4-
     446273-19-1P, N-[8-(2-Chloro-4-methoxyr enyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-20-1P, N-[8-(2-Methoxy-4,6-dimet ylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine
     446273-21-3P, N-Isobutyl-N-[8-(2-methox -4,6-dimethylphenyl)-2-
     (methylsu3fanyl)imidazo[1,2-a]pyrazin-3 yl]-N-propylamine
     446273-22-9P, N-[8-(2-Chloro-4-methoxyp enyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-isobutyl-N-propylamine
     446273-23- )P, N-[8-(2,6-Dimethoxy-4-met ylphenyl)-2-
     (methylsu_fanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine 446273-24-LP, N-[8-(2,4-Dimethoxyphenyl -2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-lyl]-N,N-dipropylamine
     446273-25-3P, N-[8-(2,4-Dimethoxy-6-met ylphenyl)-2-
     (methylsubfanyl)imidazo[1,2-a]pyrazin-3 yl]-N,N-dipropylamine 446273-27-4P, N,N-Dicyclopropylmethyl-N [8-(2-methoxy-4,6-
     dimethylphenyl)-2-(methylsulfanyl)imida o[1,2-a]pyrazin-3-yl]amine
     446273-29-5P 446273-31-0P, N-Cyclopropy methyl-N-[8-(2-
     methoxy-4,5-dimethylphenyl)-2-(methylsu fanyl)imidazo[1,2-a]pyrazin-: yl]-
     N-propylamine 446273-33-2P, N-[8-(2-Ch] ro-4-methoxyphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-cyclopropylmethyl-N-
     propylamin: 446273-35-4P, N-Cyclopropyl ethyl-N-(3-fluoropropyl)-
     N-[8-(2-me:hoxy-4,6-dimethylphenyl)-2-( ethylsulfanyl)imidazo[1,2-
     a]pyrazin-3-yl]amine 446273-37-6P, N-[8 (2-Chloro-4-
     methoxyphe yl)-2-(methylsulfanyl)imidaz [1,2-a]pyrazin-3-yl]-N-
     cyclopropy methyl-N-(3-fluoropropyl) ami e 446273-39-8P,
     N, N-Dicycl propylmethyl-N-[8-(2,6-dimet oxy-4-methylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]amine 446273-40-1P,
     N-Cycloprc sylmethyl-N-[8-(2,6-dimethox) 4-methylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-propylamine
     446273-41-2P
, N-Cyclopropyl nethyl-N-[8-(2,6-dimethoxy-4- ethylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-(3-fluoropropyl)amine
     446273-42-3P, N-[8-(2-Chloro-6-methoxy- -methylphenyl)-2-
     (methylsulfanyl)imidazo[1,2-a]pyrazin-3 yl]-N-cyclopropylmethyl-N-(3-
     fluoropror /l) amine 446278-18-8P
     RL: PAC (Fiarmacological activity); SPN (Synthetic preparation); THU
     (Therapeut c use); BIOL (Biological stu y); PREP (Preparation); USES
         (target product; preparation of bicy lic nitrogenous fused-ring compds. such
        as imic zopyrazines, as corticotropi -releasing factor receptor
        antagor (sts)
RN
     391954-04-! CAPLUS
CN
     Imidazo[1, ?-a]pyrazine, 8-(2,4-dichloro henyl)-3-(1-ethoxybutyl)-2-et lyl-
     (9CI) (CA INDEX NAME)
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RN 446270-84-4 CAPLU:

CN Imidazo[1,2-a]pyra..ne-3-carboxylic acid, 8-(2,4 dichlorophenyl)-2-ethyl-, methyl ester (9CI) (CA INDEX NAME)

RN 446270-85-5 CAPLU:

CN Carbamic acid, [8- :,4-dichlorophenyl)-2-ethylim dazo[1,2-a]pyrazin-3-yl]-, 1,1-dimethylethy ester (9CI) (CA INDEX NAME)

RN 446270-87-7 CAPLUS

CN Imidazo[1,2-a]pyra: \_n-3-amine, 8-(2,4-dichloroph nyl)-2-ethyl-N-propyl-(9CI) (CA INDEX N/4E)

RN 446270-88-8 CAPLUS
CN Imidazo[1,2 | pyrazin-3-amine, 8-(2,4-dic lorophenyl)-2-ethyl-N,N-dipropyl, monohydroculoride (9CI) (CA INDEX NAME

### ● HCl

RN 446270-89-9 CAPLUS
CN Imidazo[1,2:4]pyrazine-3-carboxylic acid, 6-chloro-8-(2,4-dichloropheny)2-ethyl-, me:hyl ester (9CI) (CA INDEX N ME)

RN 446270-90-2 CAPLUS
CN Carbamic acił, [6-chloro-8-(2,4-dichlorop enyl)-2-ethylimidazo[1,2-a]pyrazin-3-/1]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 446270-91-3 CAPLUS

CN Imidazo[1,2-a]pyrazir 3-amine, 6-chloro-8-(2,4-dic:lorophenyl)-2-ethyl-N-propyl- (9CI) (CA IN EX NAME)

RN 446270-92-4 CAPLUS

CN Imidazo[1,2-a]pyrazir 3-amine, 6-chloro-8-(2,4-dic:lorophenyl)-2-ethyl-N,N-dipropyl- (9CI) (CA NDEX NAME)

RN 446270-93-5 CAPLUS

CN Imidazo[1,2-a]pyrazir::-3-carboxylic acid, 8-(2,4-d chlorophenyl)-2-ethyl-6-methyl-, methyl ester (9CI) (CA INDEX NAME)

RN 446270-94-6 (\PLUS Carbamic acid, [8-(2,4-dichlorophenyl)-2-et /l-6-methylimidazo[1,2-a]pyrazin-3-yl -, 1,1-dimethylethyl ester (CI) (CA INDEX NAME)

RN 446270-95-7 ( PLUS CN Imidazo[1,2-a] yrazin-3-amine, 8-(2,4-dichl cophenyl)-2-ethyl-6-methyl-N-propyl- (9CI) (CA INDEX NAME)

RN 446270-96-8 ( PLUS CN Imidazo[1,2-a] yrazin-3-amine, 8-(2,4-dichl rophenyl)-2-ethyl-6-methyl-N,N-dipropyl-, morohydrochloride (9CI) (CA IND: ( NAME)

● HCl

RN 446270-97-9 CAPLUS
CN Imidazo[1,2-a]pyrazine, 8-(2,4-dichlorophenyl)-2-meth/l-3-nitro- (9CI)
(CA INDEX NAME)

RN 446270-98-0 CAPLUS CN Imidazo[1,2-a]pyrazin-3 amine, 8-(2,4-dichlorophenyl) 2-methyl- (9CI) (CA INDEX NAME)

RN 446270-99-1 CAPLUS
CN Imidazo[1,2-a]pyrazin-3 amine, 8-(2,4-dichlorophenyl) 2-methyl-N,Ndipropyl-, monohydrochl ride (9CI) (CA INDEX NAME)

#### HCl

RN 446271-00-7 CAF US
CN Imidazo[1,2-a]py azin-3-amine, 8-(2,4-dichlor henyl)-N-(1-ethylpropyl)-2-methyl- (9CI) ( A INDEX NAME)

RN 446271-01-8 CAF US
CN Imidazo[1,2-a]py azin-3-amine, 2-ethyl-N,N-di; opyl-8-(2,4,6-trimethylphenyl) , monohydrochloride (9CI) ( INDEX NAME)

### ● HCl

RN 446271-02-9 CAP. US CN Imidazo[1,2-a]py azin-3-amine, 8-(2,4-dichlorc henyl)-2-ethyl-N-(1ethylpropyl) -, monohydroc loride (9CI) (CA INDEX NAME,

## ● HCl

. J 446271-04-1 CAPLUS
J Imidazo[1,2-a]pyrazin-3-a ine, N-butyl-8-(2,4-dichlorop:enyl)-N,2-diethyl-

, monohydrochloride (9CI) (CA INDEX NAME)

#### HC1

1 J 446271-06-3 CAPLUS

Imidazo[1,2-a]pyrazin-3-a ine, 2-ethyl-N-(1-ethylpropyl -8-(2,4,6-trimethylphenyl)- (9CI)
CA INDEX NAME)

RN 446271-08-5 CAPLU:

CN Imidazo[1,2-a]pyra.in-3-amine, 8-(2,4-dimethoxyp enyl)-2-ethyl-N,N-dipropyl-, monohyd ochloride (9CI) (CA INDEX NA E)

# ● HCl

RN 446271-10-9 CAPLU:
CN Imidazo[1,2-a]pyra: in-3-amine, 8-(2,4-dimethoxy---methylphenyl)-2-ethylN,N-dipropyl-, monegydrochloride (9CI) (CA INDE NAME)

### ● HCl

RN 446271-12-1 CAPLUS

CN Imidazo[1,2-a]pyra: in-3-amine, 2-ethyl-N,N-dipro; yl-8-(2,4,6-

trimethoxyphenyl)-, monohyd. chloride (9CI) (CA INDEX N, E)

● HCl

RN 446271-14-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amii =, 2-ethyl-8-(4-methoxy-2,6-c methylphenyl)-N,N-dipropyl-, monohydrochlc ide (9CI) (CA INDEX NAME)

● HCl

RN 446271-16-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amir =, 2-ethyl-8-(4-methoxy-2-met ylphenyl)-N,N-dipropyl-, monohydrochlorid (9CI) (CA INDEX NAME)

#### HC1

RN 446271-18-7 CAPLUS
CN Imidazo[1,2-a]pyrazi: 3-amine, 8-(2-chloro-4-metho yphenyl)-2-ethyl-N,N-dipropyl-, monohydrocaloride (9CI) (CA INDEX NAME

## HC1

RN 446271-20-1 CAPLUS
CN Imidazo[1,2-a]pyrazi: ·3-amine, 6-chloro-8-(2-chlor -4-methoxyphenyl)-2-ethyl-N,N-dipropyl- >CI) (CA INDEX NAME)

RN 446271-22-3 CAPLUS
CN Benzonitrile, 3-chlo: >-4-[6-chloro-3-(dipropylamin )-2-ethylimidazo[1,2-

]pyrazin-8-yl]- (9CI) (CA II )EX NAME)

RN 46271-24-5 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine, 8-(2,6-dimethoxy-4-methylphe yl)-2-ethyl-,N-dipropyl- (9CI) (CA INDE> NAME)

RN 46271-30-3 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine, 8-(4-chlorophenyl)-2-ethyl-N N-dipropyl9CI) (CA INDEX NAME)

RN 46271-32-5 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine, 2-ethyl-8-(4-methoxyphenyl)- ,N-dipropyl9CI) (CA INDEX NAME)

RN 446271-34-7 CAPLUS
CN Imidazo[1,2-a]pyrazin-: amine, 2-ethyl-8-(2-methoxy-,6-dimethylphenyl)-N,N-dipropyl- (9CI) ((\) INDEX NAME)

RN 446271-35-8 CAPLUS
CN Imidazo[1,2-a]pyrazin-: amine, N-(cyclopropylmethyl) 2-ethyl-8-(2-methoxy-4,6-dimethylphenyl)-N- :-methylpropyl)- (9CI) (CA : DEX NAME)

RN 446271-37-0 CAPLUS
CN Imidazo[1,2-a]pyrazin-3 amine, 2-ethyl-6-methoxy-8-( -methoxy-4,6-dimethylphenyl)-N,N-dipcopyl- (9CI) (CA INDEX NAME)

RN 44·271-38-1 CAPLUS
CN Im lazo[1,2-a]pyrazin-3-amine, & (2,6-dimethoxy-3-pyridinyl)- -ethyl-N,N-diropyl- (9CI) (CA INDEX NAME)

RN 44 271-39-2 CAPLUS
CN Im dazo[1,2-a]pyrazin-3-amine, 2 ethyl-8-(6-methoxy-2-methyl--pyridinyl)-N, dipropyl- (9CI) (CA INDEX N ME)

RN 44·271-41-6 CAPLUS
CN Im lazo[1,2-a]pyrazin-3-amine, 8 [6-(dimethylamino)-4-methyl--pyridinyl]2--thyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

N 446271-43-8 CAPLUS

N Imidazo[1,2-a]pyrazin-3-a line, 2-ethyl-N,N-dipropyl-8- 2,4,6-trimethyl-3-pyridinyl)- (9CI) (CA INDEX NAME)

N 446271-45-0 CAPLUS

N Imidazo[1,2-a]pyrazin-3-a iine, 2-ethyl-8-(3-methyl-2-p ridinyl)-N,N-dipropyl- (9CI) (CA INDF: NAME)

N 446271-47-2 CAPLUS

N Imidazo[1,2-a]pyrazin-3-a line, 2-ethyl-8-(6-methoxy-2, -dimethyl-3-pyridinyl)-N,N-dipropyl-9CI) (CA INDEX NAME)

RN 4462 1-49-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-& hyl-8-(6-methyl-1,3-benzodio >l-5-yl)-N,N-cipropyl- (9CI) (CA INDEX NAM)

RN 446271-53-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 2-e hyl-8-(4-methoxy-2,5-dimethy bhenyl)-N,N-c propyl- (9CI) (CA INDEX NAM.)

RN 446271-55-2 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(,4-dichlorophenyl)-2-ethyl-N (2-methylpropyl)-N-propyl- (9CI) (CA INDEX NAME)

RN 446271-57-4 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-ami e, N-(cyclopropylmethyl)-8-( .4-dichlorophenyl)-2-ethyl-N-p opyl- (9CI) (CA INDEX NAME)

RN 446271-59-6 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-ami e, 8-(2,4-dichlorophenyl)-2- thyl-N-(3-fluoropropyl)-N-propyl- (9C) (CA INDEX NAME)

RN 446271-61-0 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-ami e, N-(cyclopropylmethyl)-8-(,4-dichlorophenyl)-2-ethyl-N-(-methylpropyl)- (9CI) (CA I DEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\$$

RN 446271 53-2 CAPLUS

CN Imidaz [1,2-a]pyrazin-3-amine, 8-(2, -dichlorophenyl)-2-ethyl-N,N pis(2-methyl:ropyl)-, monohydrochloride (4 I) (CA INDEX NAME)

### C1

RN 446271 55-4 CAPLUS

CN Imidaz (1,2-a)pyrazin-3-amine, 8-(2, -dichlorophenyl)-2-ethyl-N-(methyl; copyl)- (9CI) (CA INDEX NAME

RN 446271 36-5 CAPLUS

CN Imidaz [1,2-a]pyrazin-3-amine, 8-(2, -dichlorophenyl)-N,2-diethyl J-(2-methyl)-opyl)- (9CI) (CA INDEX NAME

RN 46271-68-7 CAPLUS
CN Tmidazo[1,2-a]pyrazin-3-amine N-butyl-8-(2,4-dichlorophen 1)-2-ethyl-N-(2-methylpropyl)- (9CI) (CA IND X NAME)

RN 46271-70-1 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine 8-(2,4-dichlorophenyl)-2-et:/l-N-(2-nethylpropyl)-N-(phenylmethyl - (9CI) (CA INDEX NAME)

RN :46271-72-3 CAPLUS
CN :midazo[1,2-a]pyrazin-3-amine 8-(2,4-dichlorophenyl)-2-et} /l-N-(2-nethylpropyl)-N-(2-thienylmet yl)- (9CI) (CA INDEX NAME)

RN 446271-74-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(2,4- ichlorophenyl)-2-ethyl-N-(2-furanylmethyl)-N-(2-methylpropyl)- (9C) (CA INDEX NAME)

C1
$$N \longrightarrow N \longrightarrow Et$$

$$N \longrightarrow N \longrightarrow CH_2 \longrightarrow O$$

$$i - Bu$$

RN 446271-76-7 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(2,4- ichlorophenyl)-2-ethyl-N-(3-methylbutyl)-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

RN 446271-78-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(2,4- ichlorophenyl)-2-ethyl-N-(2-methylpropyl)-N-[3-(methylthio)propyl] (9CI) (CA INDEX NAME)

RN 44·271-80-3 CAPLUS
CN Im dazo[1,2-a]pyrazin-3-amine, -(2,4-dichlorophenyl)-2-ethy. N-(2-me-hylpropyl)-N-pentyl- (9CI) CA INDEX NAME)

RN 44·271-81-4 CAPLUS
CN Im dazo[1,2-a]pyrazin-3-amine, --(cyclohexylmethyl)-8-(2,4-d\_ hlorophenyl)2-- thyl-N-(2-methylpropyl)- (9C ) (CA INDEX NAME)

RN 44·271-82-5 CAPLUS
CN Im dazo[1,2-a]pyrazin-3-amine, ·-(2,4-dichlorophenyl)-2-ethyl N-(3-fl:oropropyl)- (9CI) (CA INDEX NAME)

RN 446271-84- CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, 8-(2,4-di aloropheny

Imidazo[1,2 a]pyrazin-3-amine, 8-(2,4-di nlorophenyl)-N,2-diethyl-N-(3-fluoropropy )- (9CI) (CA INDEX NAME)

RN 446271-85-8 CAPLUS

CN Imidazo[1,2 a]pyrazin-3-amine, N-butyl-8 (2,4-dichlorophenyl)-2-ethyl-1-(3-fluoropropy)- (9CI) (CA INDEX NAME)

RN 446271-87-C CAPLUS

CN Imidazo[1,2 a]pyrazin-3-amine, 8-(2,4-di:nlorophenyl)-2-ethyl-N-(3-fluoropropy)-N-(phenylmethyl)- (9CI) (:A INDEX NAME)

RN 4462 1-88-1 CAPLUS

CN Imic zo[1,2-a]pyrazin-3-amine, 8- 2,4-dichlorophenyl)-2-ethyl-N (3-fluc opropyl)-N-(2-thienylmethyl) (9CI) (CA INDEX NAME)

RN 4462 1-89-2 CAPLUS

CN Imic zo[1,2-a]pyrazin-3-amine, 8- 2,4-dichlorophenyl)-2-ethyl-N (3-fluc opropyl)-N-(2-furanylmethyl) (9CI) (CA INDEX NAME)

RN 4462 1-90-5 CAPLUS

CN Imic zo[1,2-a]pyrazin-3-amine, 8- 2,4-dichlorophenyl)-2-ethyl-N (3-fluo opropyl)-N-(3-methylbutyl)- 9CI) (CA INDEX NAME)

C1

N

Et

N- 
$$H_2$$
-  $CH_2$ -  $CHMe_2$ 

(CH = 3-F

RN 446271-91-6 APLUS
CN Imidazo[1,2-a pyrazin-3-amine, 8-(2,4-dich\_)rophenyl)-2-ethyl-N-(3-fluoropropyl) N-[3-(methylthio)propyl]- (90) (CA INDEX NAME)

C1

N

Et

N- 
$$CH_2$$
) 3-SMe

(CH + 3-F

RN 446271-92-7 APLUS
CN Imidazo[1,2-a pyrazin-3-amine, 8-(2,4-dichlorophenyl)-2-ethyl-N-(3-fluoropropyl) N-pentyl- (9CI) (CA INDEX N/IE)

RN 446271-93-8 APLUS
CN Imidazo[1,2-a pyrazin-3-amine, N-(cyclohex) methyl)-8-(2,4-dichloropheny)2-ethyl-N-(3-luoropropyl)- (9CI) (CA INDF: NAME)

RN 446271 94-9 CAPLUS
CN Imidaz [1,2-a]pyrazin-3-amine, 8-(2 :-dichlorophenyl)-2-ethyl-N-(-fluoro:ropyl)-N-(4,4,4-trifluorobut )- (9CI) (CA INDEX NAME)

RN 446271 95-0 CAPLUS
CN Imidaz [1,2-a]pyrazin-3-amine, N-(c :lopropylmethyl)-8-(2,4-dichlo ophenyl)-2-ethyl-N-(3-fluoro: opyl)- (9CI) (CA INDEX NAME

RN 446271 96-1 CAPLUS
CN Imidaz [1,2-a]pyrazin-3-amine, 8-(2:-dichlorophenyl)-2-ethyl-N-(-fluoro;ropyl)-N-(2-methylpropyl)- (EI) (CA INDEX NAME)

RN 446271-97-2 CA LUS
CN Imidazo[1,2-a]p razin-3-amine, 8-(2,4-dichlor phenyl)-2-ethyl-N-(2-methylpropyl)-N (4,4,4-trifluorobutyl)- (9CI) (CA INDEX NAME)

RN 446271-98-3 CA LUS
CN Imidazo[1,2-a]p razin-3-amine, 8-(2,4-dichlor phenyl)-2-ethyl-N-(3-methylbutyl)- (CI) (CA INDEX NAME)

RN 446271-99-4 CA LUS
CN Imidazo[1,2-a]p razin-3-amine, 8-(2,4-dichlor phenyl)-N,2-diethyl-N-(3-methylbutyl)- (CI) (CA INDEX NAME)

RN 446272-C -0 CAPLUS
CN Imidazo (,2-a)pyrazin-3-amine, N-buty -8-(2,4-dichlorophenyl)-2-eth l-N-(3-methylbu yl)- (9CI) (CA INDEX NAME)

RN 446272-C -1 CAPLUS
CN Imidazo[ ,2-a]pyrazin-3-amine, 8-(2,4 lichlorophenyl)-2-ethyl-N-(3-methylbu yl)-N-(2-thienylmethyl)- (9C (CA INDEX NAME)

RN 446272-0 -2 CAPLUS
CN Imidazo[ ,2-a]pyrazin-3-amine, 8-(2,4 lichlorophenyl)-2-ethyl-N,N-b s(3-methylbu yl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CHMe}_2 \\ \end{array}$$

RN 446272-03-3 CAPL 3
CN Imidazo[1,2-a]pyr zin-3-amine, 8-(2,4-dichlorop enyl)-2-ethyl-N-(3-methylbutyl)-N-[3 (methylthio)propyl]- (9CI) (A INDEX NAME)

C1

N Et

N-CH<sub>2</sub> 
$$CH_2$$
-CHMe<sub>2</sub>

(CH<sub>2</sub>) 3- Me

RN 446272-04-4 CAPL 3
CN Imidazo[1,2-a]pyr zin-3-amine, 8-(2,4-dichlorop enyl)-2-ethyl-N-(3-methylbutyl)-N-pe zyl- (9CI) (CA INDEX NAME)

RN 446272-05-5 CAPL 3
CN Imidazo[1,2-a]pyr zin-3-amine, 8-(2,4-dichlorop enyl)-2-ethyl-N-(3-methylbutyl)-N-(4 1,4-trifluorobutyl)- (9CI) (A INDEX NAME)

RN 446272-06- CAPLUS

CN Imidazo[1, -a]pyrazin-3-amine, N-(cyclop opylmethyl)-8-(2,4-dichloroph nyl)-2-ethyl-N-(3-methylbutyl - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Cl} & & \text{Et} \\ & & & \text{N} & \text{Et} \\ & & & & \text{N} - \text{CH}_2 - \text{CH}_2 - \text{CHMe}_2 \end{array}$$

RN 446272-07- CAPLUS
CN Imidazo[1, -a]pyrazin-3-amine, 8-(2,4-di hlorophenyl)-2-ethyl-N-(3-methylbuty)-N-propyl- (9CI) (CA INDEX AME)

$$C1$$
 $N$ 
 $N$ 
 $V-CH_2-CH_2-CHMe_2$ 

 $n\cdot \ \, \cdot r$ 

RN 446272-08- CAPLUS
CN Imidazo[1, -a]pyrazin-3-amine, 8-(4-chlc o-2-methoxyphenyl)-2-ethyl-N N-dipropyl- 9CI) (CA INDEX NAME)

RN 446272-09-9 CAPLUS
CN Imidazo[1,2-a]pyraz 1-3-amine, 8-(4-bromo-2-chlor phenyl)-2-ethyl-N,N-dipropyl- (9CI) (C INDEX NAME)

RN 446272-10-2 CAPLUS
CN Imidazo[1,2-a]pyraz 1-3-amine, 8-(2,4-dibromopher. 1)-2-ethyl-N,N-dipropyl(9CI) (CA INDEX NA :)

RN 446272-11-3 CAPLUS
CN Imidazo[1,2-a]pyraz 1-3-amine, 8-(4-bromo-2-fluor phenyl)-2-ethyl-N,N-dipropyl- (9CI) (C. INDEX NAME)

RN 446272-12-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amine, 8-(2-bromo---methoxyphenyl)-2-ethyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

RN 446272-13-5 CAPLUS

CN Imidazo[1,2-4]pyrazin-3-amine, 8-(2,4-dich prophenyl)-2-ethyl-N-(1-methylpropyl--N-propyl- (9CI) (CA INDEX N ME)

RN 446272-14-6 CAPLUS

CN Imidazo[1,2-1]pyrazin-3-amine, N-(cyclopro.ylmethyl)-8-(2,4-dichlorophen/l)-2-ethyl-N-(1-methylpropyl) (9CI) (CA INDEX NAME)

RN 446272-15-7 CAPLUS
CN Imidazo[1,2-a]pyrazin --amine, N-butyl-8-(2,4-dichl rophenyl)-2-ethyl-N-(1-methylpropyl)- (9CI) CA INDEX NAME)

RN 446272-16-8 CAPLUS
CN Imidazo[1,2-a]pyrazin -amine, 8-(2,4-dichloropheny )-2-ethyl-N-(1-methylpropyl)-N-(2-met .ylpropyl)- (9CI) (CA INDEX AME)

RN 446272-17-9 CAPLUS

CN Imidazo[1,2-a]; razin-3-amine, N-(cyclopropy methyl)-8-(2,4-dichlorophenyl 2-ethyl-N-[(tetrahydro-3-thi myl)methyl]- (9CI) (CA INDEXNAME)

RN 446272-18-0 C, LUS
CN Imidazo[1,2-a]; razin-3-amine, 8-(2,4-dichlo phenyl)-2-ethyl-N-propyl-N[(tetrahydro-3 hienyl)methyl]- (9CI) (CA I DEX NAME)

RN 446272-19-1 C/ LUS
CN Imidazo[1,2-a]; razin-3-amine, 8-(2,6-dimeth/xy-4-methylphenyl)-2-ethylN,N-bis(2-meth) propyl)- (9CI) (CA INDEX NA\* E)

RN 446272-20-4 C/ LUS

CN Imidazo[1,2-a]pyrazin-3- mine, 8-(2-chloro-4-methoxy₁ =nyl)-2-ethyl-N,Nbis(2-methylpropyl)- (9€) (CA INDEX NAME)

- RN 446272-21-5 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3- mine, 2-ethyl-8-(2-methoxy-4 5-dimethylphenyl)-N,N-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)

- RN 446272-22-6 CAPLUS
- Imidazo[1,2-a]pyrazin-3- mine, 2-ethyl-N,N-bis(2-meth lpropyl)-8-(2,4,6trimethylphenyl)- (9CI) (CA INDEX NAME)

- RN 446272-23-7 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3- mine, N-butyl-8-(2-chloro-4- ethoxyphenyl)-2ethyl-N-(2-methylpropyl) (9CI) (CA INDEX NAME)

RN 446272-24-8 CAPl S
CN Imidazo[1,2-a]pyl zin-3-amine, N-butyl-2-ethyl N-(2-methylpropyl)-8-(2,4,6-trimethylphenyl) (9CI) (CA INDEX NAME)

RN 446272-25-9 CAPI S
CN Imidazo[1,2-a]py: zin-3-amine, N-butyl-8-(2,6-cimethoxy-4-methylphenyl)-2-ethyl-N-(2-methyl ropyl)- (9CI) (CA INDEX NAM:

RN 446272-26-0 CAP1 S
CN Imidazo[1,2-a]py1 zin-3-amine, N-butyl-2-ethyl 3-(2-methoxy-4,6-dimethylphenyl)-\(\chi\) (2-methylpropyl)- (9CI) (CA [NDEX NAME)

RN 446272-27-1 CAPLUS

Rt. 446272-28-2 CAPLUS

Ch Imidazo[1,2-a]pyrazin-3-am ne, N-(cyclopropylmethyl)-8-2,6-dimethoxy-4-methylphenyl)-2-ethyl-N-(2 methylpropyl)- (9CI) (CA IN 3X NAME)

$$(Me) \longrightarrow (Me) \longrightarrow$$

RN 446272-29-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-am ne, 6-bromo-8-(4-chloropheny -2-ethyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

RN 446272-30-6 CAPLUS
CN Imidazo[1,2-a]pyraz n-3-amine, 6-bromo-8-(2,4-di nlorophenyl)-2-ethyl-N,N-dipropyl- (9CI) (( INDEX NAME)

RN 446272-32-8 CAPLUS
CN Imidazo[1,2-a]pyraz n-3-amine, 6-bromo-8-(2,4-dicnlorophenyl)-2-ethyl-N-(2-methylpropyl)-N-prc yl- (9CI) (CA INDEX NAME)

RN 446272-33-9 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amin , 8-(2,4-dichlorophenyl)-2-( methylethyl)-N,N-dipropyl- (9CI) (CA IND X NAME)

RN 446272-34-0 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-amin , 8-(2-methoxy-4,6-dimethylpl nyl)-2-(1-methylethyl)-N,N-dipropyl- (CI) (CA INDEX NAME)

RN 446272-35-1 CAPLUS

CN Imidazo[1,2-a]pyrazine, 3-(1 ethoxybutyl)-2-ethyl-8-(2-met .oxy-4,6-dimethylphenyl)- (9CI) (CA NDEX NAME)

RN 446272-36-2 CAPLUS
CN Imidazo[1,2-a]pyrazir , 8-(2,4-dimethoxy-6-methylp ∋nyl)-3-(1-ethoxybutyl)2-ethyl- (9CI) (CA ].DEX NAME)

RN 446272-37-3 CAPLUS
CN Imidazo[1,2-a]pyrazir , 8-(2,6-dimethoxy-4-methylp enyl)-3-(1-ethoxybutyl)-2-ethyl- (9CI) (CA l DEX NAME)

RN 446272-38-4 CAPLUS
CN Imidazo[1,2-a]pyrazir, 8-(2-chloro-4-methoxypheny :-3-(1-ethoxybutyl)-2-ethyl- (9CI) (CA INL X NAME)

)Me

4 6272-39-5 CAPLUS RN

idazo[1,2-a]pyrazine-3-metha ol, 2-ethyl-8-(2-methoxy-4,6 CN

c methylphenyl) -α,α-dipropyl- 9CI) (CA INDEX NAME)

e

4 6272-40-8 CAPLUS RN

CNlidazo[1,2-a]pyrazine, 2-ethy -8-(2-methoxy-4,6-dimethylph yl)-3-[(1Z)-1-

p opyl-1-butenyl] - (9CI) (CA NDEX NAME)

Doubl∈ bond geometry as shown.

1e

RN4 6272-41-9 CAPLUS CN Imidazo[1,2-a]pyrazine, 2-ethyl-8-(2-methoxy-4,6-dim hylphenyl)-3-(1-propylbutyl)- (9CI) (C INDEX NAME)

RN 446272-42-0 CAPLUS

CN Imidazo[1,2-a]pyrazine, 2-ethyl-3-[(1Z)-1-ethyl-1-propenyl]-8-(2-methoxy-4,6-dimethylphenyl)- (9:[) (CA INDEX NAME)

Double bond geometry as show .

RN 446272-43-1 CAPLUS

CN Imidazo[1,2-a]pyrazine, 2-ethyl-3-(1-ethylpropyl)-8- -methoxy-4,6-dimethylphenyl)- (9CI) (CA INDEX NAME)

RN 446272-44-2 CAPLUS

CN Imidazo[1,2-a]pyrazine, 3-(2,4-dimethoxyphenyl)-2-et} 1-3-(1-ethylpropyl)-

## (90 ) (CA INDEX NAME)

MeO N Et CHEt2

RN 446 72-52-2 CAPLUS
CN Imi.azo[1,2-a]pyrazin-3-amine, 8 (2,4-dichlorophenyl)-2-(methy thio)-N,N-dip opyl- (9CI) (CA INDEX NAME)

RN 446 72-53-3 CAPLUS
CN Im: azo[1,2-a]pyrazin-3-amine, 8 (2,4-dichlorophenyl)-N-(2-met ylpropyl)-2(me hylthio)-N-propyl- (9CI) (C INDEX NAME)

RN 446 72-54-4 CAPLUS
CN Imi azo[1,2-a]pyrazin-3-amine, 8 (2,4-dichloro-6-methylphenyl) 2-ethyl-N,N-dir opyl- (9CI) (CA INDEX NAME)

- R 446272-55-5 CAPLUS
- C Imidazo[1,2-a]pyrazin-3-a ine, 8-[2-chloro-4-(trifluoro ethyl)phenyl]-2-ethyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

- R 446272-56-6 CAPLUS
- C Imidazo[1,2-a]pyrazin-3-a ne, 8-[2-bromo-4-(1-methylet yl)phenyl]-2-ethyl-N,N-dipropyl- (9CI) (CA IDEX NAME)

- R 446272-57-7 CAPLUS
- C Imidazo[1,2-a]pyrazin-3-a ne, 8-(2-bromo-6-methoxy-4-n thylphenyl)-2-ethyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

RN 4462' -58-8 CAPLUS

CN Imid: o[1,2-a]pyrazin-3-amine, 8-( bromo-4,6-dimethylphenyl)-2-:thyl-N,N-diprc yl- (9CI) (CA INDEX NAME)

RN 4462' -59-9 CAPLUS
CN Imida o[1,2-a]pyrazin-3-amine, 8-( 4-dimethylphenyl)-2-ethyl-N,'-dipropyl(9Cl (CA INDEX NAME)

Me N Et 
$$N \in \mathbb{R}^{N}$$
  $N \in \mathbb{R}^{N}$ 

RN 44627 -60-2 CAPLUS
CN Imida o[1,2-a]pyrazin-3-amine, 8-(. chloro-4-methylphenyl)-2-eth\_l-N,N-diprc yl- (9CI) (CA INDEX NAME)

RN 446272-61-3 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-ami :, 8-(2-chloro-6-methoxy-4-me hylphenyl)-2-ethyl-N,N-dipropyl- (9CI) :A INDEX NAME)

RN 446272-62-4 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-ami :, 8-(2-bromo-4-methylphenyl) 2-ethyl-N,N-dipropyl- (9CI) (CA INDEX ME)

RN 446272-63-5 CAPLUS

CN Imidazo[1,2-a]pyrazin-3-ami =, 8-(2-chloro-4,6-dimethylph nyl)-2-ethyl-N,N-dipropyl- (9CI) (CA INDEX \ME)

RN 446272 4-6 CAPLUS
CN Imidazc 1,2-a]pyrazin-3-amine, N-(cyc opropylmethyl)-8-(2,4-dichlo: phenyl)-2-ethyl-N-(2-methoxye hyl)-, monohydrochloride (9C) (CA

₩ HCl

RN 446272 5-7 CAPLUS
CN Imidazc 1,2-a]pyrazin-3-amine, 8-(2,4 dichlorophenyl)-2-ethyl-N-(2 methox; thyl)- (9CI) (CA INDEX NAME)

RN 446272- 6-8 CAPLUS
CN Imidazc 1,2-a]pyrazin-3-amine, 8-(2,4 dichlorophenyl)-2-ethyl-N-(2 methoxy thyl)-N-propyl- (9CI) (CA INDEX NAME)

RN 46272-67-9 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine N-butyl-8-(2,4-dichloropheny)-2-ethyl-N-(2-ethoxyethyl)- (9CI) (CA IND : NAME)

RN 46272-68-0 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine 8-(2,4-dichlorophenyl)-2-eth l-N-(2-ethoxyethyl)-N-pentyl- (9CI) (CA INDEX NAME)

RN 46272-69-1 CAPLUS
CN midazo[1,2-a]pyrazin-3-amine 8-(2,4-dichlorophenyl)-2-eth l-N-(2-ethoxyethyl)-N-(2-methylprop l)- (9CI) (CA INDEX NAME)

RN 446272-70 & CAPLUS
CN Imidazo[1 2-a]pyrazin-3-amine, N-(cyclc ropylmethyl)-8-(2,4-dichlorop anyl)-2-ethyl-N-(2-methylbut) )- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{Me} \\ & & \text{Me} \\ & & \text{CH}_2\text{--}\text{CH}\text{--}\text{Et} \\ & & & \text{N} \\ & & & \text{CH}_2 \end{array}$$

RN 446272-71 5 CAPLUS
CN Imidazo[1 ?-a]pyrazin-3-amine, 8-(2,4-c chlorophenyl)-2-ethyl-N-(2-methylbut l)-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

RN 446272-72 5 CAPLUS
CN Imidazo[1 2-a]pyrazin-3-amine, N-(cyclc utylmethyl)-N-(cyclopropylme 1yl)-8-(2,4-di 1lorophenyl)-2-ethyl- (9CI) CA INDEX NAME)

RN 446272-73-7 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, ! (cyclobutylmethyl)-8-(2,4-di hlorophenyl)2-ethyl-N-propyl- (9CI) (CA IN: X NAME)

RN 446272-74-8 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amine, ! (cyclobutylmethyl)-8-(2,4-di nlorophenyl)2-ethyl-N-(2-methylpropyl)- (9C (CA INDEX NAME)

RN 446272-75-9 CAPLUS
CN Imidazo[1,2 1]pyrazin-3-amine, 8-(2,4-dic lorophenyl)-2-ethyl-N-(4-fluorobutyl N-propyl- (9CI) (CA INDEX N ME)

RN 446272-76-0 CAPLUS
CN Imidazo[1,2 1]pyrazin-3-amine, N-(cyclopr pylmethyl)-8-(2,4-dichlorophe /l)-2-ethyl-N-(4-fluorobutyl) (9CI) (CA INDEX NAME)

RN 446272-77-1 CAPLUS
CN Imidazo[1,2 1]pyrazin-3-amine, 8-(2,4-dic lorophenyl)-2-ethyl-N-(4-fluorobutyl N-(2-methylpropyl)- (9CI) (A INDEX NAME)

RN 4462 2-78-2 CAPLUS
CN Imid 20[1,2-a]pyrazin-3-amine, N,N bis(cyclopropylmethyl)-8-(2,4 dich prophenyl)-2-ethyl- (9CI) (C INDEX NAME)

RN 4462 ?-79-3 CAPLUS
CN Buta. mide, N-[8-(2,4-dichlorophen l)-2-ethylimidazo[1,2-a]pyra: n-3-yl]-N(3-f loropropyl)- (9CI) (CA INDEX NAME)

RN 4462 2-80-6 CAPLUS CN Prop. menitrile, 3-[[8-(2,4-dichlor:phenyl)-2-ethylimidazo[1,2-a] yrazin-3-

yl]propylamin - (9CI) (CA INDEX NAME)

RN 446272-81-7 . \PLUS

CN Propanenitril: 3-[(cyclopropylmethyl)[8-(2 4-dichlorophenyl)-2-ethylimidazo[ 2-a]pyrazin-3-yl]amino]- (9C) (CA INDEX NAME)

RN 446272-82-8 \PLUS

CN Imidazo[1,2-a yrazin-3-amine, N-butyl-N-(c clobutylmethyl)-8-(2,4-dichloropheny -2-ethyl- (9CI) (CA INDEX N ME)

RN 446272-83-9 (APLUS

CN Imidazo[1,2-a yrazin-3-amine, N-butyl-N-(c clopropylmethyl)-8-(2,4-dichloropheny -2-ethyl- (9CI) (CA INDEX N ME)

RN 446272 34-0 CAPLUS

CN Imidaz [1,2-a]pyrazin-3-amine, N-but l-8-(2-chloro-6-methoxy-4-methyl. enyl)-2-ethyl-N-(2-methylprc, /l)- (9CI) (CA INDEX NAME)

RN 446272 35-1 CAPLUS

CN Imidaz [1,2-a]pyrazin-3-amine, 8-(2- aloro-6-methoxy-4-methylphen )-N,N-bis(cy opropylmethyl)-2-ethyl- (9Cl (CA INDEX NAME)

RN 446272 36-2 CAPLUS

CN Imidaz  $\{1,2-a\}$  pyrazin-3-amine, N,N-b  $\{1,2-a\}$  pyrazin-3-am

RN 446272-87-3 CAF .US

CN Imidazo[1,2-a]py azin-3-amine, 8-(2-chloro-4-methoxyphenyl)-N,N-bis(cyclopropylm thyl)-2-ethyl- (9CI) (CA INDEX NAME)

RN 446272-88-4 CAF US

CN Imidazo[1,2-a]py azin-3-amine, N,N-bis(cyclopropylmethyl)-2-ethyl-8-(2-methoxy-4,6-dime hylphenyl)- (9CI) (CA INDEX NAME)

RN 446272-85 5 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, 8-(2-ch )ro-6-methoxy-4-methylphenyl -N-(cycloprc ylmethyl)-2-ethyl-N-(2-methy )utyl)- (9CI) (CA INDEX NAM)

RN 446272-90 8 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N-(cyclc ropylmethyl)-8-(2,6-dimetho:y-4-methylphe yl)-2-ethyl-N-(2-methylbutyl) (9CI) (CA INDEX NAME)

MeO 
$$N$$
  $N$   $Et$   $CH_2-CH-Et$   $N$   $CH_2$ 

RN 446272-91 9 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, 8-(2-chloro-4-methoxyphenyl)-N-(cycloprc ylmethyl)-2-ethyl-N-(2-methyloutyl)- (9CI) (CA INDEX NAMI)

RN 446272-92 0 CAPLUS

CN Imidazo[1 2-a]pyrazin-3-amine, N-(cyclc ropylmethyl)-2-ethyl-8-(2-methoxy-4,6-dimet ylphenyl)-N-(2-methylbutyl)- (9CI) (CA INDEX NAME)

RN 446272-93-1 CAPLU

CN Imidazo[1,2-a]pyra in-3-amine, 8-(2-chloro-6-me loxy-4-methylphenyl)-N-(cyclopropylmethyl -2-ethyl-N-propyl- (9CI) (C INDEX NAME)

RN 446272-94-2 CAPLU

CN Imidazo[1,2-a]pyra in-3-amine, N-(cyclopropylme 1yl)-8-(2,6-dimethoxy-4-methylphenyl)-2-et yl-N-propyl- (9CI) (CA INDF NAME)

RN 446272-95-3 CAPLU

CN Imidazo[1,2-a]pyra in-3-amine, 8-(2-chloro-4-me loxyphenyl)-N-(cyclopropylmethyl -2-ethyl-N-propyl- (9CI) (C INDEX NAME)

RN 446272-96-4 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, N-(cyclop: pylmethyl)-2-ethyl-8-(2-met) xy-4,6-dimethy phenyl)-N-propyl- (9CI) (CA NDEX NAME)

RN 446272-97-5 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, 8-(2-chlo:>-6-methoxy-4-methylphenyl)-1 ethyl-N,N-b s(2-methylpropyl)- (9CI) (C, INDEX NAME)

RN 446272-98-6 CAPLUS
CN Imidazo[1,2 a]pyrazin-3-amine, 8-(2-chlo: -6-methoxy-4-methylphenyl)-N (cyclopropy methyl)-2-ethyl-N-(2-methylp: pyl)- (9CI) (CA INDEX NAME)

RN 446272-99-7 CAPLUS
CN Imidazo[1,2-a]pyrazi -3-amine, 8-(2-chloro-4-meth yphenyl)-2-ethyl-N-(3-fluoropropyl)-N-prop l- (9CI) (CA INDEX NAME)

RN 446273-00-3 CAPLUS
CN Imidazo[1,2-a]pyrazi -3-amine, 8-(2-chloro-6-meth .y-4-methylphenyl)-2-ethyl-N-(3-fluoroprc /l)-N-propyl- (9CI) (CA IND .NAME)

RN 446273-01-4 CAPLUS
CN Imidazo[1,2-a]pyrazi -3-amine, N,N-bis(cyclopropy ethyl)-8-(2,4-dibromophenyl)-2-eth l- (9CI) (CA INDEX NAME)

RN 446273-02-5 APLUS

CN Imidazo[1,2-a pyrazin-3-amine, 8-(2-bromo-6 methoxy-4-methylphenyl)-N,N-bis(cycloprop lmethyl)-2-ethyl- (9CI) (CA NDEX NAME)

RN 446273-03-6 APLUS

CN Imidazo[1,2-a pyrazin-3-amine, 8-(2-bromo-4 methoxyphenyl)-N,N-bis(cycloprop tmethyl)-2-ethyl- (9CI) (CA NDEX NAME)

RN 446273-04-7 (APLUS

CN Imidazo[1,2-a pyrazin-3-amine, N,N-bis(cycl propylmethyl)-8-(2,4-dichlore -

6-methoxyphenyl)-2-eth l- (9CI) (CA INDEX NAME)

RN 446273-05-8 CAPLUS

CN Imidazo[1,2-a]pyrazin- -amine, 8-(2-bromo-4,6-dimet| lphenyl)-N-(cyclopropylmethyl)-2 thyl-N-propyl- (9CI) (CA INI X NAME)

RN 446273-06-9 CAPLUS

CN Imidazo[1,2-a]pyrazin- -amine, 8-(2,4-dibromophenyl; 2-ethyl-N,N-bis(2-methylpropyl)- (9CI) CA INDEX NAME)

RN 446273-07-0 CAPLUS

CN Imidazo[1,2-a]pyrazin- -amine, 8-[5-chloro-4-(2,5-di ethyl-1H-pyrrol-1-yl)-2-methoxyphenyl]-N,N-b s(cyclopropylmethyl)-2-ethyl (9CI) (CA INDEX NAME)

RN 446273-08-1 CA: JUS

CN Imidazo[1,2-a]p azin-3-amine, 8-(4-amino-5-c loro-2-methoxyphenyl)-N,N-bis(cyclopropylrethyl)-2-ethyl- (9CI) (CA IN EX NAME)

RN 446273-09-2 CA; JUS

CN Imidazo[1,2-a]p; azin-3-amine, 8-[2-chloro-4-trifluoromethoxy)phenyl]-N,N bis(cyclopropylr:thyl)-2-ethyl- (9CI) (CA IN EX NAME)

N 446273-10-5 CAPLUS

N Imidazo[1,2-a]pyrazin-3- nine, 8-[2-chloro-4-(trifluor methyl)phenyl]-N,N-bis(cyclopropylmethyl)-2 =thyl- (9CI) (CA INDEX NAME)

N 446273-11-6 CAPLUS

N Imidazo[1,2-a]pyrazin-3- nine, 8-(2,4-dichlorophenyl)- -ethyl-6-methoxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

N 446273-12-7 CAPLUS

N Imidazo[1,2-a]pyrazin-3- nine, 6-chloro-2-ethyl-8-(2-m-thoxy-4,6-dimethylphenyl)-N,N-dipr pyl- (9CI) (CA INDEX NAME)

RN 446273-13-8 CAPL! ;

CN Imidazo[1,2-a]pyr.:in-3-amine, 6-chloro-N,N-bis cyclopropylmethyl)-2-ethyl-8-(2-methoxy-4,6-c methylphenyl)- (9CI) (CA IN EX NAME)

RN 446273-14-9 CAPLUE

CN Imidazo[1,2-a]pyr. in-3-amine, 6-chloro-N-(cycl propylmethyl)-2-ethyl-8-(2-methoxy-4,6-dimet) lphenyl)-N-propyl- (9CI) (C INDEX NAME)

RN 446273-15-0 CAPLU:

CN Imidazo[1,2-a]pyra:in-3-amine, 6-chloro-N-(cycl propylmethyl)-2-ethyl-N-(3-fluoropropyl)-8-(: methoxy-4,6-dimethylphenyl)- (9CI) (CA INDEX NAME)

- RN 446273-16-1 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-am :e, 6-chloro-8-(2-chloro-4-me:noxyphenyl)-N-(cyclopropylmethyl)-2-ethy N-(3-fluoropropyl)- (9CI) (.4 INDEX NAME)

C) 
$$N \longrightarrow N \longrightarrow Et$$
  $N \longrightarrow CH_2 \longrightarrow C$ 

- RN 446273-17-2 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-am .e, 6-chloro-8-(2-chloro-4-me loxyphenyl)-2-ethyl-N-(3-fluoropropyl)-N ropyl- (9CI) (CA INDEX NAME

- RN 446273-18-3 CAPLUS
- CN Imidazo[1,2-a]pyrazin-3-am :e, 6-chloro-8-(2-chloro-4-me :oxyphenyl)-2-ethyl-N-(1-ethylpropyl)- ( 'I) (CA INDEX NAME)

RN 446273-20-7 CAPLUS
CN Imidazo[1,2-a]pyraz: -3-amine, 8-(2-methoxy-4,6-d methylphenyl)-2(methylthio)-N,N-di; opyl- (9CI) (CA INDEX NAME)

RN 446273-21-8 CAPLUS
CN Imidazo[1,2-a]pyrazi:-3-amine, 8-(2-methoxy-4,6-d methylphenyl)-N-(2-methylpropyl)-2-(methylphenyl)-N-propyl- (9CI) (CA INDEX NAME)

RN {46273-22-9 CAPLUS CN lmidazo[1,2-a]pyrazin-3-amine 8-(2-chloro-4-methoxyphenyl) N-(2-nethylpropyl)-2-(methylthio) -propyl- (9CI) (CA INDEX NAME)

RN .46273-23-0 CAPLUS
CN lmidazo[1,2-a]pyrazin-3-amine 8-(2,6-dimethoxy-4-methylphenyl)-2methylthio)-N,N-dipropyl- (5 I) (CA INDEX NAME)

RN 146273-24-1 CAPLUS
CN Imidazo[1,2-a]pyrazin-3-amin∈ 8-(2,4-dimethoxyphenyl)-2-(methylthio)-N,N-lipropyl- (9CI) (CA INDEX NA E)

RN 446273-25-2 CAPLUS
CN Imidazo[1,2-a]pyrazin -amine, 8-(2,4-dimethoxy-6-me.hylphenyl)-2(methylthio)-N,N-dipre yl- (9CI) (CA INDEX NAME)

RN 446273-27-4 CAPLUS
CN Imidazo[1,2-a]pyrazin- -amine, N,N-bis(cyclopropylmethyl)-8-(2-methoxy-4,6-dimethylphenyl)-2-(met ylthio)- (9CI) (CA INDEX NAFE)

RN 446273-29-6 CAPLUS
CN Imidazo[1,2-a]pyrazin- -amine, 8-(2-chloro-4-methoxy)henyl)-N,N-bis(cyclopropylmethyl) 2-(methylthio)- (9CI) (CA II)EX NAME)

## Me OMe $N \longrightarrow N$ SMe $N \longrightarrow N$ $N \longrightarrow CH_2 \longrightarrow N$ $N \longrightarrow Pr$

1e

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RN 4 5273-35-4 CAPLUS
CN I dazo[1,2-a]pyrazin-3-amine, -(cyclopropylmethyl)-N-(3-flu ropropyl)-8-
( methoxy-4,6-dimethylphenyl)- -(methylthio)- (9CI) (CA INT X NAME)
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'N 446273-37-6 CAPLUS

Imidazo[1,2-a]pyrazin-3 nine, 8-(2-chloro-4-methoxypl nyl)-N(cyclopropylmethyl)-N-(3 fluoropropyl)-2-(methylthio) (9CI) (CA INDEX NAME)

N 446273-39-8 CAPLUS

IM Imidazo[1,2-a]pyrazin-3 mine, N,N-bis(cyclopropylmetl l)-8-(2,6-dimethoxy-4-methylphenyl)-2-(methy thio)- (9CI) (CA INDEX NAME)

N 446273-40-1 CAPLUS

N Imidazo[1,2-a]pyrazin-3-:mine, N-(cyclopropylmethyl)-8 (2,6-dimethoxy-4-methylphenyl)-2-(methylt-io)-N-propyl- (9CI) (CA INDE: NAME)

RN 446 3-41-2 CAPLUS
CN Imi zo[1,2-a]pyrazin-3-amine, N- zyclopropylmethyl)-8-(2,6-di thoxy-4-met lphenyl)-N-(3-fluoropropyl)- -(methylthio)- (9CI) (CA IN! X NAME)

RN 446 3-42-3 CAPLUS
CN Imi zo[1,2-a]pyrazin-3-amine, 8- ?-chloro-6-methoxy-4-methylp? nyl)-N-(cy opropylmethyl)-N-(3-fluoropr zyl)-2-(methylthio)- (9CI) A INDEX NAM.

RN 446: 8-18-8 CAPLUS
CN Imic zo[1,2-a]pyrazin-3-amine, 8-2-bromo-4,6-dimethylphenyl)-1 N-bis yclopropylmethyl)-2-ethyl- (CI) (CA INDEX NAME)

R 'ERENCE COUNT: 34 HERE ARE 34 CITED REFERENCES .VAILABLE FOR THIS ECORD. ALL CITATIONS AVAILABL IN THE RE FORMAT

ANSWER 17 OF 22 CAPLUS C PYRIGHT 2006 ACS on STN

2002:5 +712 CAPLUS ESSION NUMBER:

D٠ UMENT NUMBER: 137:15 267

Method using pyrazine compounds and pyridine Т LE:

compou is for inhibiting JAK kinases compound

prepar tion, and therapeutic use
Burns, Christopher John; Wilks, Andı w Frederick
Cytopi Pty. Ltd., Australia I ENTOR(S):

P. 'ENT ASSIGNEE(S):

PCT In . Appl., 92 pp. CODEN: PIXXD2 S' 'RCE:

D UMENT TYPE: Patent

L GUAGE: Englis

F 'ILY ACC. NUM. COUNT:

P ENT INFORMATION:

|                  | PATENT NO.           | KIND        |          | APPLICATION NO.     |                |  |  |  |
|------------------|----------------------|-------------|----------|---------------------|----------------|--|--|--|
|                  | WO 2002060492        |             |          | WO 2002-AU89        |                |  |  |  |
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|                  | CO, CR, CU,          | CZ, DE      | DK, DM,  | DZ, EC, EE, ES, FI, | B, GD, GE, GH, |  |  |  |
|                  | GM, HR, HU,          | ID, IL      | IN, IS,  | JP, KE, KG, KP, KR, | Z, LC, LK, LR, |  |  |  |
|                  | LS, LT, LU,          | LV, MA      | MD, MG,  | MK, MN, MW, MX, MZ, | O, NZ, OM, PH, |  |  |  |
|                  | PL, PT, RO,          | RU, SD      | SE, SG,  | SI, SK, SL, TJ, TM, | N, TR, TT, TZ, |  |  |  |
|                  | UA, UG, US,          | UZ, VN      | YU, ZA,  | ZM, ZW              |                |  |  |  |
|                  | RW: GH, GM, KE,      | LS, MW      | MZ, SD,  | SL, SZ, TZ, UG, ZM, | W, AT, BE, CH, |  |  |  |
|                  | CY, DE, DK,          | ES, FI      | FR, GB,  | GR, IE, IT, LU, MC, | L, PT, SE, TR, |  |  |  |
|                  | BF, BJ, CF,          | CG, CI      | CM, GA,  | GN, GQ, GW, ML, MR, | E, SN, TD, TG  |  |  |  |
|                  | CA 2436487           | AA 20020808 |          | CA 2002-2436487     | 20020130       |  |  |  |
|                  | EP 1363702           | Al          | 20031126 | EP 2002-715984      | 20020130       |  |  |  |
|                  | R: AT, BE, CH,       | DE, DK      | ES, FR,  | GB, GR, IT, LI, LU, | L, SE, MC, PT, |  |  |  |
|                  |                      |             |          | CY, AL, TR          |                |  |  |  |
|                  | JP 2004528295        | T2          | 20040916 | JP 2002-560683      | 20020130       |  |  |  |
|                  | US 2004102455        | A1          | 20040527 | US 2003-470955      | 20030730       |  |  |  |
|                  | US 2006069084        | A1          | 20060330 | US 2005-223633      | 20050909       |  |  |  |
| $\mathbf{P}_{F}$ | ORITY APPLN. INFO.:  |             |          | AU 2001-2792        | A 20010130     |  |  |  |
|                  |                      |             |          | AU 2001-2793        | A 20010130     |  |  |  |
|                  |                      |             |          | WO 2002-AU89        | W 20020130     |  |  |  |
|                  |                      |             |          | US 2003-470955      | A3 20030730    |  |  |  |
| Ο.               | ER SOURCE(S): MARPAT |             | 137:1502 | 67                  |                |  |  |  |

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AB
     The i ention provides methods of i libiting JAK kinases involvi:
                                                                        the use
     of a oup of compds. based either on a 2-amino-6-carba-disubs: tuted
     pyraz e scaffold or a 2-amino-6-ca a-disubstituted pyridine sc. fold.
     The i ention also provides methods of treating JAK-associated d ease
     state:
     ICM . 1K031-435
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     ICS : 1K031-443; A61K031-4436; A61 \( \)\( \)31-4439; A61K031-444; A61K0 \( \) -496;
         1K031-497; A61K031-4985; A61 31-5377; A61K031-551; A61P0 -12;
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          : 1P035-02
CC
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            harmacology)
     Sectic cross-reference(s): 28
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     Aller
             inhibitors
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     Anti-F zheimer's agents
     Antia: hritics
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     Human mmunodeficiency virus
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     Rheum oid arthritis
     Sjogre
           syndrome
        (p) azine compds. and pyridine c pds. for inhibiting JAK kina es,
        cor ound preparation, and therap. tic use)
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     44526: 27-4
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     RL: PAC (Pharmacological act 'ity); THU (Therapeutic use); BIOL
     (Biological study); USES (Us ;)
        (pyrazine compds. and pyr line compds. for inhibiting & K kinases,
        compound preparation, and herapeutic use)
     445263-67-2 445263-70-7 4452 3-86-5
IT
     445263-93-4 445264-07-3 4452-1-11-9
     445264-20-0
     RL: PAC (Pharmacological act 'ity); THU (Therapeutic use); BIOL
     (Biological study); USES (Us ;)
        (pyrazine compds. and pyr line compds. for inhibiting C K kinases,
        compound preparation, and :herapeutic use)
RN
     445263-67-2 CAPLUS
     Phenol, 4-[8-(4-morpholinyl) nidazo[1,2-a]pyrazin-6-yl]- (CI) (CA INDEX
CN
     NAME)
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RN 445263-86-5 CAPLUS
CN Imidazo[1,2-a]pyrazine, 8-(hacahydro-4-methyl-1H-1,4-diaze in-1-yl)-6-(1-naphthalenyl)- (9CI) (CA INESX NAME)

RN 445263-9-4 CAPLUS

CN Phenol, -[8-(4-morpholinyl)imidazo[1 -a]pyrazin-6-yl]- (9CI) (CF INDEX NAME)

RN 445264-C -3 CAPLUS

CN Benzoic cid, 4-[8-[4-(2-pyridinyl)-1 iperazinyl]imidazo[1,2-a]pyl zin-6-yl]- (9C) (CA INDEX NAME)

RN 445264-1 -9 CAPLUS

CN Benzoic cid, 4-[8-[4-(4-pyridinyl)-1 iperazinyl]imidazo[1,2-a]pyr zin-6-yl]- (9C) (CA INDEX NAME)

RN4 5264-20-0 CAPLUS

lidazo[1,2-a]pyrazine, 8-(4-m:thyl-1-piperazinyl)-6-(3-pyriinyl)- (9CI) CN A INDEX NAME)

REFERF CE COUNT: 5 THER: ARE 5 CITED REFERENCES AVAIL 3LE FOR THIS RECOID. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYR: 3HT 2006 ACS on STN L57 SWER 18 OF 22

ACCESS ON NUMBER: 2002:29344: CAPLUS

DOCUME T NUMBER:

TITLE:

136:319426

Imidazo[1,:-a] pyridine-, imidazo[1,2-a]p simidine and

imidazo[1,2-a]pyrazine-3-yl-amine deriva ives for nitric oxice synthase-inhibiting pharmac uticals

INVENT R(S): Sundermann, Bernd; Maul, Corinna; Hennie,

Hagen-Hein: ich; Schneider, Johannes

PATENT ASSIGNEE(S):

Gruenenthal Gmbh, Germany

SOURCE PCT Int. Apol., 114 pp.

CODEN: PIX> 02

DOCUME T TYPE: Patent

LANGUA E: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| F  | TENT NO |        |     | KIN | ס   | DATI |      | i   | APPL  | CAT:        | ION I | NO. |     | D  | ATE  |     |
|----|---------|--------|-----|-----|-----|------|------|-----|-------|-------------|-------|-----|-----|----|------|-----|
| -  |         |        |     |     | -   |      |      |     |       | - <b></b> - |       |     |     |    |      |     |
| M. | 200203  | 0428   |     | A1  |     | 2002 | )418 | 1   | WO 20 | 001-1       | EP11  | 701 |     | 20 | 0011 | 010 |
|    | W: A    | E, AG, | AL, | AM, | ΑT, | AU,  | AZ,  | BA, | BB,   | BG,         | BR,   | BY, | BZ, | A, | CH,  | CN, |
|    | C       | O, CR, | CU, | CZ, | DK, | DM,  | DZ,  | EC, | EE,   | ES,         | FI,   | GB, | GD, | Ξ, | GH,  | GM, |
|    | H       | R, HU, | ID, | IL, | IN, | IS,  | JP,  | KE, | KG,   | KP,         | KR,   | ΚZ, | LC, | Х, | LR,  | LS, |

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PRIORITY APPLN. [NFO.:
                                                2000-10050663
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                                                2001-EP11701
                                                                     2001101
OTHER SOURCE(S)
                         MARPAT 136:319426
AΒ
     The title
                ompds. are used for producing
                                               pharmaceuticals for inhibiti ; NO
     synthase,
                or treating migraine and for
                                               reating septicemic shock,
     multiple s lerosis, Parkinson's disease
                                               Alzheimer's disease,
     Huntington ; chorea, inflammation, infl.
                                               matory pains, cerebral ische .a,
     diabetes,
                eningitis, arteriosclerosis
                                               d/or for wound healing. Thu
     (5,7-dimet /l-2-thiophen-3-yl-imidazo[1
                                               -a]pyridin-3-yl)-(1,1,3,3-
     tetramethy outyl)amine-HCl showed 74% i
                                               ibition in the NO synthase a
                                                                              ;ay.
     Further, 1 ; (5,7-dimethyl-2-p-tolylimic zo[1,2-a]pyridin-3-yl)-(1,1,
     tetramethy outyl)amine-HCl was dissolved in 1-L water for use in injection
     solns.
IC
     ICM A61K0 .-4985
     ICS A61K0 .-519
CC
     1-12 (Phar (cology)
     Section cr ;s-reference(s): 28, 63
TT
     Anti-Alzhe mer's agents
     Anti-infla latory agents
     Antiarteri ;clerotics
     Antidiabet : agents
     Antimigrai : agents
     Antiparkin onian agents
     Meningitis
     Multiple s .erosis
     Wound heal 1g
        (imidaz pyridine- and imidazopyrimid.
                                               e and imidazopyrazineamine
        derivs. for nitric oxide synthase-inl
                                               biting pharmaceuticals)
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    PAC (Pharmacological activity ; SPN (Synthetic preparation : THU
(Th capeutic use); BIOL (Biologic 1 study); PREP (Preparation)
                                                                 USES
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    imidazopyridine- and imidazor rimidine and imidazopyrazine nine
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RL: PAC (Pharmacological activity ; SPN (Synthetic preparation ; THU
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IT

(Therapeutic ise); BIOL (Biological study PREP (Preparation); USES (Uses) (imidazop idine- and imidazopyrimidin and imidazopyrazineamine derivs. f initric oxide synthase-inhi: ting pharmaceuticals) 412359-76-3P 112359-82-1P 412359-98-9P IT 412361-60-5P RL: PAC (Pha Nacological activity); SPN ('nthetic preparation); THU (Therapeutic se); BIOL (Biological study PREP (Preparation); USES (imidazop 'idine- and imidazopyrimidin, and imidazopyrazineamine derivs. f nitric oxide synthase-inhit ting pharmaceuticals) RN 412359-76-3 'APLUS CN 2-Thiophenec boxylic acid, 5-[3-(butylam o)imidazo[1,2-a]pyrazin-2-yl (CA I DEX NAME)

RN 412359-82-1 :APLUS
CN 2-Thiophenec :boxylic acid, 5-[3-[(1,1-di thylethyl)amino]imidazo[1,2-a]pyrazin-2-]- (9CI) (CA INDEX NAME)

RN 412360-15-7 :APLUS
CN 2-Thiophenec boxylic acid, 5-[3-[acetyl( 1-dimethylethyl)amino]imidaz [1,2-a]pyrazin :-yl]- (9CI) (CA INDEX NAME;

RN 41236' 67-9 CAPLUS

CN 2-Thichenecarboxylic acid, 5-[3-[a etyl(1,1,3,3-

tetra :: thylbutyl)amino]imidazo[1,2 ]pyrazin-2-yl]- (9CI) (CA I )EX NAME)

RN 41236 95-3 CAPLUS

CN Aceta de, N-(1,1-dimethylethyl)-N 2-[5-(methylthio)-2-thien ]imidazo[1,2-a]pyrazin-3-yl] (9CI) (CA INDEX NAME)

RN 41236, 97-5 CAPLUS

CN Aceta: de, N-[2-[5-(methylthio)-2-t ienyl]imidazo[1,2-a]pyrazin- yl]-N-(1,1,. 3-tetramethylbutyl)- (9CI) CA INDEX NAME)

RN 41236 38-7 CAPLUS

CN Glyci::, N-acetyl-N-[2-(2-methylphe yl)imidazo[1,2-a]pyrazin-3-y -,

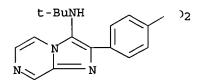
methyl ester ( I) (CA INDEX NAME)

RN412361-45-6 C LUS

Acetamide, N-b yl-N-[2-(3,4,5-trimethoxyph← /l)imidazo[1,2-a]pyrazin-3-CNyl] - (9CI) (C. INDEX NAME)

RN 412361-60-5 C. LUS

Imidazo[1,2-a]: razin-3-amine, N-(1,1-dimet) lethyl)-2-(4-nitrophenyl)-, CN hydrochloride ·CI) (CA INDEX NAME)



x HCl

REFERENCE COUNT: 7 THERE ARE 7 CITED EFERENCES AVAILABLE FOR THIS RECORD. ALL CITATI NS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2006 ACS a STN L57 ANSWER 19 OF 2.

2002:107321 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:167373

Preparation of imidazoly derivatives as agonists or TITLE:

antagonists of somatosta in receptors

INVENTOR (S): Thurieau, Christophe Ala 1; Poitout, Lydie Francine;

Galcera, Marie-Odile; Gc lon, Thomas D.; Morgan, Barry

A.; Moinet, Christophe F ilippe; Bigg, Dennis

PATENT ASSIGNEE(S): Societe De Conseils De F cherches Et D'applications

Scientifiques (S.C.R.A.S ), Fr.

SOURCE: PCT Int. Appl., 369 pp. Gembeh /728652 05/10/2006

CODEN: PIXXD2

DOCUMENT TYPE. Patent LANGUAGE: English

FAMILY ACC. | M. COUNT: 1

PATENT INFOR: TION:

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KIND DATE APPLICATION NO.
                                                APPLICATION NO. DATE
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                       A2 20020207 WO 2001-US23959 2001 '31
A3 20020808
     WO 2002( 0140
     WO 2002( 0140
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4 AA 20020207 CA 2001-2417204 2001 31
4 A2 20030502 EP 2001-957342 2001 31
     CA 2417: )4
     EP 13051 4
          R: T, BE, CH, DE, DK, ES, FR, C, GR, IT, LI, LU, NL, SE, MC PT,
               E, SI, LT, LV, FI, RO, MK, ( , AL, TR
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NZ 2001-523774
NO 2003-473
     JP 2004! 8613 T2 20040624
                                                                            2001 / 31
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     NO 2003( 0473 A
                                                                            2003 .30
                                    20030130
                                                  US 2000-222584P P 2000 01
WO 2001-US23959 W 2001 31
PRIORITY APPL 1. INFO.:
OTHER SOURCE :): MARPAT 136:16737
GI
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## \* STRUCTURE | AGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRIN \*

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Imidazo.: derivs. I [R1 = H, (CH2)mC( CH2)mZ1, (CH2)mZ1, etc.; Z1
AB
       (un) sub: ituted benzo[b] thiophene, Pi naphthyl, etc.; m = 0-6; R2 - H,
      alkyl; F and R2 taken together with he nitrogen atoms to which t: :y are attached form II-IV; R3 = (CH2)mE(CH: nZ2; E = 0, S, CO, etc.; Z2 H,
      alkyl, 1 :2, etc.; R4 = H, (CH2)mA1; i = C(:Y)NX1X2; C(:Y)X2; C(:N): X2, X2; Y = :, S; X1 = H, alkyl, etc.; X1 = alkyl, etc.; R5 = alkyl,
       (un) sub: ituted aryl, etc.; R6 = H, & Kyl; R7 = alkyl, (CH2) mZ4; Z =
      (un) substituted Ph, naphthyl, indolyletc.], which are useful as conists or antagonists of somatostatin receptors (no data) and for inhibiting the
      proliferation of Helicobacter pylori, were prepared Thus, activat ag
       2-furancerboxylic acid with carbonylc imidazole followed by addition of
      2-{(1S) -amino-2-(indol-3-yl)ethyl} -phenyl-1H-imidazole afforder 94% the titl compound V. Compds. I are ffective at 0.01-10.0 mg/kg/c iy.
      ICM C0' 233-54
IC
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ICS C0' 0403-06; A61P005-02

28-9 (He erocyclic Compounds (More T) a One Hetero Atom)) CC Section ross-reference(s): 1

IT Nerve, c sease

(dial tic neuropathy; preparation f imidazolyl derivs. as agonists or antagonists of somatos atin receptors)

167983-{ -4P 175531-38-1P 252279 1-1P 252279-15-5P 252292-7 -0P 252292-72-1P 252292 3-2P 252292-74-3P IT 252292 '0-9P 252292 '5-4P 252292-' '-6P **252292-78-7P** 252292-8( LP 252292-81-2P 252292-8-3P 252292-83-4P 252292-1-5P 252292-85-6P 252292-86-7P

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               2' 294-42-1P
                                              2 '294-44-3P
252294-41-0P
                               252294-43-2P
                                                              252294-45-4P
               2: 294-47-6P
                                              2 '294-49-8P
252294-46-5P
                               252294-48-7P
                                                              252294-50-1P
               2: 294-52-3P
                               252294-53-4P
                                              2 :294-54-5P
252294-51-2P
                                                              252294-55-6P
               2! 294-57-8P
                               252294-59-0P
                                              2 .294-60-3P
252294-56-7P
                                                              252294-61-4P
252294-62-5P
               2! 294-63-6P
                               252294-64-7P
                                              2 .294-65-8P
                                                              252294-66-9P
               2º 294-68-1P
                                              2 '294-70-5P
252294-67-0P
                               252294-69-2P
                                                              252294-71-6P
               2' 294-73-8P
252294-72-7P
                               252294-74-9P
                                              2 294-75-0P
                                                              252294-76-1P
               2: 294-78-3P
252294-77-2P
                               252294-79-4P
                                              2 294-80-7P
                                                              252294-81-8P
252294-82-9P 2522 44-83-0P 252294-85-2P
252294-87-4P 2522-4-88-5P
                             252294-89-6P
                                            252 4-90-9P
252294-91-0P
               2: 294-92-1P
                               252294-93-2P
                                              2 294-94-3P
                                                              252294-95-4P
252294-96-5P
               2: 294-97-6P
                               252294-98-7P
                                              2 .294-99-8P
                                                              252295-00-4P
               25 295-02-6P
252295-01-5P
                               252295-03-7P
                                              2 .295-04-8P
                                                              252295-05-9P
               25 295-07-1P
                                              2 :295-09-3P
252295-06-0P
                               252295-08-2P
                                                              252295-10-6P
               25 295-12-8P
                               252295-13-9P
                                              2 .295-14-0P
252295-11-7P
                                                              252295-15-1P
252295-17-3P
               25 295-18-4P
                               252295-19-5P
RL: PAC (Pharmac ogical activity); SPN (Synth ic preparation); THU
(Therapeutic use) BIOL (Biological study); PR (Preparation); USES
(Uses)
   (preparation < imidazolyl derivs. as agoni s or antagonists of
   somatostatin : ceptors)
               25 295-21-9P
252295-20-8P
                               252295-22-0P
                                              2 .295-23-1P
                                                              252295-24-2P
252295-26-4P
               25 295-27-5P
                               252295-28-6P
                                              2 1295-29-7P
                                                              252295-30-0P
               25 295-32-2P
252295-31-1P
                               252295-33-3P
                                              2 :295-34-4P
                                                              252295-35-5P
252295-36-6P
               25 295-37-7P
                               252295-38-8P
                                              2 :295-39-9P
                                                              252295-40-2P
252295-42-4P
               25 295-44-6P
                               252295-45-7P
                                              2 :295-46-8P
                                                              252295-47-9P
252295-48-0P
               25 295-49-1P
                               252295-51-5P
                                              2:295-52-6P
                                                              252295-53-7P
252295-54-8P
               25 295-55-9P
                               252295-56-0P
                                              2 :295-57-1P
                                                              252295-58-2P
252295-59-3P
               25 295-61-7P
                               252295-62-8P
                                              2 '295-63-9P
                                                              252295-64-0P
252295-65-1P
               25 295-66-2P
                               252295-67-3P
                                              2 '295-70-8P
                                                              252295-71-9P
252295-72-0P
               25 295-73-1P
                               252295-74-2P
                                              2 295-75-3P
                                                              252295-76-4P
252295-77-5P
               25.295-78-6P
                               252295-79-7P
                                              2 295-80-0P
                                                              252295-81-1P
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IT

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252295-82 P
                              252295-8! 5P
                                                            252295-8' 7P
              252295-84-4P
                                             252295-86-6P
                            252295-9( .2P
252295-88··P
             252295-89-9P
                                                            252295-9: 4P
                                             252295-91-3P
                                                            252295-9' 9P
252295-93- P 252295-94-6P
                            252295-95 /P
                                             252295-96-8P
252295-98 P
             252295-99-1P
                              252296-0( /P
                                                            252296-0: 9P
                                             252296-01-8P
252296-03- P
             252296-04-1P
                              252296-0! P
                                             252296-06-3P
                                                            252296-0" 4P
                              252296-1( 3P
252296-08· P
                                             252296-11-0P
                                                            252296-1: 1P
             252296-09-6P
252296-13 P 252296-14-3P
                                                            252296-1' 6P
                              252296-15 IP
                                           252296-16-5P
252296-18-TP 252296-19-8P 252296-20-1P
252296-21-3P 252296-22-3P 252296-23-4P
252296-24-9P 252296-25-6P 252296-27-8P
252296-28-4P 252296-29-0P 252296-30-3P
252296-31- iP 252296-32-5P 252296-33-6P
252296-34-TP 252296-35-8P 252296-36-9P
252296-38-1P 252296-39-2P 252296-40-5P
252296-41-5P 252296-42-7P 252296-43-8P
252296-44-9P 252296-45-0P 252296-46-1P
252296-47-3P 252296-48-3P 252296-49-4P
252296-50-7P 252296-51-8P 252296-52-9P
252296-53-0P 252296-54-1P 252296-55-2P
252296-56-3P 252296-57-4P 252296-58-5P
              252296-60-9P
252296-59-6P
                              252296-63 JP
                                             252296-62-1P
252296-63· P
                              252296-65 1P
              252296-64-3P
                                             252296-66-5P
                                                            252296-6' 6P
252296-69- P
                             252296-72 3P
             252296-71-2P
                                             252296-73-4P
                                                            252296-7- 5P
252296-75-· P
             252296-76-7P
                              252296-77 3P
                                             252296-78-9P
                                                            252296-75 OP
252296-80 P
             252296-81-4P
                              252296-82 3P
                                                            252296-8: 7P
                                             252296-83-6P
             252296-86-9P
                              252296-87 )P
252296-85- P
                                                            252296-8: 2P
                                             252296-88-1P
                              252296-92 1P
252296-90- P
             252296-91-6P
                                             252296-93-8P
                                                            252296-94 9P
                              252296-97 2P
252296-95 P
             252296-96-1P
                                                            252296-95 4P
                                             252296-98-3P
             252297-01-1P
                              252297-02 3P
252297-00- P
                                             252297-03-3P
                                                            252297-05 5P
252297-06- P
             252297-07-7P
                              252297-08 3P
                                             252297-09-9P
                                                            252297-1( 2P
             252297-12-4P
252297-11· P
                              252297-13 5P
                                             252297-14-6P
                                                            252297-1: 7P
252297-16 · P
             252297-18-0P
                              252297-20 IP
                                             252297-21-5P
                                                            252297-21 6P
252297-23- P
             252297-24-8P
                              252297-25 →P
                                             252297-26-0P
                                                            252297-2° 1P
                                                            252297-3: 8P
252297-28- P
             252297-29-3P
                              252297-30 5P
                                             252297-31-7P
252297-33- P
             252297-34-0P
                              252297-35 LP
                                             252297-36-2P
                                                            252297-3
                                                                     3 P
                                                            252297-3 3P
252297-4: 1P
252297-38 P
             252297-39-5P
                              252297-41 3P
                                             252297-42-0P
252297-44 · P
              252297-45-3P
                              252297-4€ ↓P
                                             252297-47-5P
                                                            252297-41 6P
252297-49- P
              252297-50-0P
                              252297-51 LP
                                             252297-52-2P
                                                            252297-53 3P
252297-54- P
              252297-55-5P
                              252297-5€ 5P
                                             252297-57-7P
                                                            252297-5F 8P
252297-59 P
              252297-60-2P
                              252297-61 3P
                                             252297-62-4P
                                                            252297-63 5P
252297-64 · P
              252297-65-7P
                              252297-6€ 3P
                                            252297-67-9P
                                                            252297-61 OP
252297-69- P
RL: PAC (F armacological activity); SPN (Synthetic preparation); THU
(Therapeut c use); BIOL (Biological stu /); PREP (Preparation); USES
   (preparation of imidazolyl derivs. a agonists or antagonists of
   somatos atin receptors)
252292-78-TP 252294-83-0P 252294-85-2P
252294-87-4P 252294-88-5P 252296-18-7P
252296-19-8P 252296-20-1P 252296-21-2P
252296-22-3P 252296-23-4P 252296-24-5P
252296-25-6P 252296-27-8P 252296-28-9P
252296-29-0P 252296-30-3P 252296-31-4P
252296-32-5P 252296-33-6P 252296-34-7P
252296-35-8P 252296-36-9P 252296-38-1P
252296-39-2P 252296-40-5P 252296-41-6P
252296-42-7P 252296-43-8P 252296-44-9P
252296-45-0P 252296-46-1P 252296-47-2P
252296-48-3P 252296-49-4P 252296-50-7P
252296-51-8P 252296-52-9P 252296-53-0P
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IT

252296-54-1P 25229, 55-2P 252296-56-3P 252296-57-4P 25229, 58-5P 252296-59-6P

RL: PAC (Pharmacol ical activity); SPN (Synthet preparation); THU (Therapeutic use); IOL (Biological study); PREP Preparation); USES

(Uses)

(preparation of midazolyl derivs. as agonist or antagonists of

somatostatin re ptors)

RN 252292-78-7 CAPLU.

CN Imidazo[1,2-a]pyra ne-8-butanamine, 2,6-dipheny (9CI) (CA INDEX NAME)

RN 252294-83-0 CAPLU!

CN Imidazo[1,2-a]pyra: ne-2-acetamide, N,8-bis(4-am obutyl)- $\alpha$ ,  $\alpha$ -dimethyl-6-(3-nitro henyl)- (9CI) (CA INDEX NAM

$$02N$$

$$N$$

$$N$$

$$H_2N-(CH_2)_4$$

$$O_2N$$

RN 252294-85-2 CAPLU!

CN Imidazo[1,2-a]pyra: ne-2-acetamide, N,8-bis(4-am .obutyl)-6-(4-chloro-3-nitrophenyl)- $\alpha$ ,  $\alpha$ -d ethyl- (9CI) (CA INDEX NAME

C1

NO2

$$V$$
 $C-NH-(CH_2)_4-NH_2$ 
 $H_2N-(CH_2)_4$ 

RN 252294-87-4 CAPLUS

CN Imidazo[1,2-a]pyra: ne-2-acetamide, N,8-bis(4-am obutyl)-6-benzo[b]thien-3-yl- $\alpha$ ,  $\alpha$ -dimethyl-9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{(CH}_2)_4 - \text{NH}_2 \\ & \text{Me} & \text{N} \\ & \text{N$$

RN 252294-88-5 CAPLUS

CN Imidazo[1,2- |pyrazine-2-acetamide, N,8-b  $\cdot$ (4-aminobutyl)- $\alpha$ , $\alpha$ -dimethyl-6-(-nitrophenyl)- (9CI) (CA IN X NAME)

$$\begin{array}{c|c}
 & \text{Me} & \text{O} \\
 & \text{I} & \text{II} \\
 & \text{C-C-NH-} (CH_2)_4 - NH_2 \\
 & \text{Me} \\
 & \text{H}_2N - (CH_2)_4
\end{array}$$

RN 252296-18-7 CAPLUS

CN Imidazo[1,2-]pyrazine-2-acetamide, 8-(4- ninobutyl)-N-(2-furanylmethyl  $\alpha, \alpha$ -dimethyl 6-(3-nitrophenyl)- (9CI) (C INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} & \text{O} \\
 & \text{N} & \text{C} & \text{C} & \text{NH-CH}_2 \\
 & \text{N} & \text{Me}
\end{array}$$

$$\begin{array}{c|c}
 & \text{H}_2\text{N-(CH}_2 & \text{4})
\end{array}$$

RN 252296-19-8 CAPLUS

CN Imidazo[1,2- |pyrazine-2-acetamide, 8-(4- linobutyl)-6-(4-chloro-3nitrophenyl) N-(2-furanylmethyl)-α,α-dime lyl- (9CI) (CA INDEX NAME)

RN 252296-20-1 CAPLUS

CN Imidazo[1,2-|pyrazine-2-acetamide, 8-(4- $\alpha$ inobutyl)-N-[2-(1H-indol-3-yl)ethyl]- $\alpha$ , -dimethyl-6-(3-nitrophenyl)- 9CI) (CA INDEX

NAME)

CH2

CH2

NH H2N-(CH2)4 
$$O$$

Me-C

Me

Me

RN 252296-22-3 CAPLUS CN Imidazo[1,2-a]pyrazir -2-acetamide, 8-(4-aminobuty -N-[2-(1H-indol-3-yl)ethyl]- $\alpha$ ,  $\alpha$ -dimethy -6-(2-phenylethyl)- (9CI) ( INDEX NAME)

RN 252296-23-4 C.- 2LUS

CN Imidazo[1,2-a], /razine-2-acetamide, N,8-bis -aminobutyl)- $\alpha$ ,  $\alpha$ -dimethyl-6-(2-:nenylethyl)- (9CI) (CA INDE) NAME)

RN 252296-24-5 C-PLUS

CN Imidazo[1,2-a]./razine-2-acetamide, N,8-bis -aminobutyl)- $\alpha$ , $\alpha$ -dimethyl-6-(ph-nylmethyl)- (9CI) (CA INDEX AME)

$$\begin{array}{c|c} & \text{H}_2\text{N}-\text{(CH}_2)_4\\ & & \text{O}\\ & & \text{N} \end{array}$$

RN 252296-25-6 CAPLUS

CN Imidazo[1,2-a]; /razine-2-acetamide, N,8-bis -aminobutyl)-6-(4chlorophenyl)-...α-dimethyl- (9CI) (CA INDE) NAME)

Cl

Me O

C C C NH- (CH<sub>2</sub>) 
$$_4$$
 - NH<sub>2</sub>

H<sub>2</sub>N- (CH<sub>2</sub>)  $_4$ 

RN 252296-27-8 CAPLUS

CN Imidazo[1,2-a]pyrazine- acetamide, 8-(4-aminobutyl)- -(diphenylmethyl)-  $\alpha, \alpha$ -dimethyl-6-(3-nitro enyl)- (9CI) (CA INDEX NAME

RN 252296-28-9 CAPLUS

CN Imidazo[1,2-a]pyrazine- acetamide, 8-(4-aminobutyl)- -(4-chloro-3-nitrophenyl)-N-(dipheny methyl)- $\alpha$ ,  $\alpha$ -dimethyl- (9CI) CA INDEX NAME)

RN 252296-29-0 CAPLUS

CN Imidazo[1,2-a]pyrazine- acetamide, 8-(4-aminobutyl)- -cyclohexyl-  $\alpha,\alpha$ -dimethyl-6-(3-nitro lenyl)- (9CI) (CA INDEX NAME

RN 252296-30-3 CAPLUS

CN Imidazo[1,2-a]pyrazine- acetamide, 8-(4-aminobutyl)- -(4-chloro-3-nitrophenyl)-N-cyclohex -α,α-dimethyl- (9CI) (CA IN ΣΧ NAME)

RN 252296-31-4 CAP JS

CN Imidazo[1,2-a]py  $\alpha$ zine-2-acetamide, 8-(4-amino:utyl)-N-cyclohexyl- $\alpha$ ,  $\alpha$ -dimethyl-6-( phenylethyl)- (9CI) (CA INDEX NAME)

RN 252296-32-5 CAP JS

CN Imidazo[1,2-a]py zine-2-acetamide, 8-(4-amino utyl)-N-cyclohexyl- $\alpha,\alpha$ -dimethyl-6-(nenylmethyl)- (9CI) (CA INDE NAME)

RN 252296-33-6 CAP. JS

CN Imidazo[1,2-a]py azine-2-acetamide, 8-(4-amino: atyl)-6-benzo[b]thien-3-yl-N-cyclohexyl-α,α limethyl- (9CI) (CA INDEX NAE)

RN 252296-34-7 CAP. JS

CN Imidazo[1,2-a]py azine-2-acetamide, 8-(4-amino:utyl)-N-cyclohexyl- $\alpha,\alpha$ -dimethyl-6-( $\cdot$ -nitrophenyl)- (9CI) (CA IND:X NAME)

F:. 252296-35-8 CAPLUS

CX Imidazo[1,2-a]pyrazine-2- etamide, 8-(4-aminobutyl)-6- \text{\text{\$\chi}}-chlorophenyl)-N-cyclohexyl-α,α-dimethyl- CI) (CA INDEX NAME)

PH 252296-36-9 CAPLUS

C: Imidazo[1,2-a]pyrazine-2- etamide, 8-(4-aminobuty1)-N- /clohexyl-6-(3,4-dichlorophenyl)-α,α-dimet l- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \text{Me O} \\ \hline & N & \text{Ne O} \\ \hline & N & \text{Me} \\ \hline & N & \text{Me} \\ \hline & N & \text{Me} \\ \end{array}$$

RN 252296-38-1 CAPLUS

CN Imidazo[1,2-a]pyrazine-2- etamide, 8-(4-aminobutyl)-N-/clohexyl-6-(2,3-dihydro-1,4-benzodioxin-6 l)-α,α-dimethyl- (9CI) (CA \*\*JDEX\*\*
NAME)

RN 252296-39-2 CAPLUS

CN Imidazo[1,2-a]pyrazine-2- etamide, 8-(4-aminobutyl)-6- 1-bromophenyl)-N-

cyclohexyl- $\alpha$ ,  $\alpha$ -dim hyl- (9CI) (CA INDEX NAME)

RN 252296-40-5 CAPLU
CN Imidazo[1,2-a]pyra ne-2-acetamide, 8-(4-aminobu /1)-N-butyl-α,α-dimethyl-6-(3- trophenyl)- (9CI) (CA INDEX JAME)

RN 252296-41-6 CAPLU
CN Imidazo[1,2-a]pyra ne-2-acetamide, 8-(4-aminobu /1)-N-butyl-6-(4-chloro-3-nitrophenyl)-α,α-d ethyl- (9CI) (CA INDEX NAME

C1
$$NO_2$$
 $CC-NHBu-n$ 
 $H_2N-(CH_2)_4$ 

RN 252296-42-7 CAPLU. CN Imidazo[1,2-a]pyra. ne-2-acetamide, 8-(4-aminobu /l)-N-butyl- $\alpha,\alpha$ -dimethyl-6-(2-: enylethyl)- (9CI) (CA INDEX JAME)

RN 252296-43-8 CAPLU.
CN Imidazo[1,2-a]pyra. ne-2-acetamide, 8-(4-aminobu /1)-N-butyl-

 $\alpha, \alpha$ -dimethyl-6-(phenylmethy - (9CI) (CA INDEX NAME)

RN 252296-44-9 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-ac $\epsilon$  amide, 8-(4-aminobutyl)-6-be :o[b]thien-3-yl-N-butyl- $\alpha$ , $\alpha$ -dimethyl- (9CI) (CA INDEX NAME)

RN 252296-45-0 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-ac $\epsilon$  amide, 8-(4-aminobuty1)-N-bu 1- $\alpha,\alpha$ -dimethy1-6-(4-nitropheny )- (9CI) (CA INDEX NAME)

RN 252296-46-1 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-acε amide, 8-(4-aminobutyl)-N-bu /l-6-(4-chlorophenyl)-α,α-dimethyl- 9CI) (CA INDEX NAME)

RN 252296-47-2 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-ac∈ amide, 8-(4-aminobutyl)-N-bu '1-6-(3,4-dichlorophenyl)-α,α-dimethyl (9CI) (CA INDEX NAME)

C1

Me

C-

NHBu-n

$$H_2N-(CH_2)_4$$

RN 252296-48-3 CAPLUS CN Imidazo[1,2-a]pyrazi -2-acetamide, 8-(4-aminobuty -N-butyl-6-(2,3-dihydro-1,4-benzodio n-6-yl)- $\alpha$ , $\alpha$ -dimethyl- (9CI) CA INDEX NAME)

RN 252296-49-4 CAPLUS CN Imidazo[1,2-a]pyrazi: -2-acetamide, 8-(4-aminobuty -6-(4-bromophenyl)-N-butyl- $\alpha$ ,  $\alpha$ -dimethyl- CI) (CA INDEX NAME)

RN 252296-51-8 CAPLUS

CN nidazo[1,2-a]pyrazine-2-aceta ide, 8-(4-aminobutyl)-6-(4-c oro-3-trophenyl)-α,α-dimethyl-N-[2 (2-pyridinyl)ethyl]- (9CI) A

(DEX NAME)

RN ·2296-52-9 CAPLUS
CN ·idazo[1,2-a]pyrazine-2-aceta ide, 8-(4-aminobutyl)-α,αmethyl-6-(2-phenylethyl)-N-[-(2-pyridinyl)ethyl]- (9CI) CA INDEX

(ME)

RN 2296-54-1 CAPLUS
CN nidazo[1,2-a]pyrazine-2-aceta ide, 8-(4-aminobutyl)-6-benz b]thien-3-ylα-dimethyl-N-[2-(2-pyridinyl ethyl]- (9CI) (CA INDEX NAM:

RN . 2296-55-2 CAPLUS
CN vidazo[1,2-a]pyrazine-2-aceta ide, 8-(4-aminobutyl)-α,αmethyl-6-(4-nitrophenyl)-N-[-(2-pyridinyl)ethyl]- (9CI) CA INDEX

NAME)

RN 252296-56-3 CAPLUS

CN Imidazo[1,2-a]pyrazine -acetamide, 8-(4-aminobutyl) -(4-chlorophenyl) -  $\alpha, \alpha$ -dimethyl-N-[2-(2-p) idinyl)ethyl]- (9CI) (CA IN :X NAME)

RN 252296-57-4 CAPLUS

CN Imidazo[1,2-a]pyrazine -acetamide, 8-(4-aminobutyl) :-(3,4-dichlorophenyl)- $\alpha$ ,  $\alpha$ -dichlorophenyl) = (2-(2-pyridinyl)ethyl (9CI) (CA INDEX NAME)

Me C NH-CH<sub>2</sub>-CH<sub>2</sub> N Me 
$$\frac{1}{N}$$
 N Me  $\frac{1}{N}$  N Me

RN 252296-59-6 CAPLUS

CN Imidazo[1,2-a]pyrazine -acetamide, 8-(4-aminobutyl) -- (4-bromophenyl) -  $\alpha, \alpha$ -dimethyl-N-[2-(2-py idinyl)ethyl] - (9CI) (CA IN: X NAME)

L57 AN. ER 20 OF 22 CAPLUS COPYRIG 2 2006 ACS on STN

ACCESSI' NUMBER: 2002:72101 **\PLUS** 

DOCUMEN NUMBER: 136:134786

Preparation fimidazo[1,2-a]pyrazines fo the TITLE:

treatment of neurological disorders

INVENTO: S): Bakthavatach Lam, Rajagopal; Wilde, Richa : G.;

Gilligan, Pa ! J.

PATENT / SIGNEE(S): Dupont Pharm ceuticals Company, USA

SOURCE: PCT Int. App ., 48 pp.

CODEN: PIXXD

DOCUMEN TYPE: Patent English LANGUAG.

FAMILY . C. NUM. COUNT: 1

PATENT FORMATION:

| PA       | NT NO.                 |               |   | ATE     |  |  |  |
|----------|------------------------|---------------|---|---------|--|--|--|
| WO<br>WO | 002006286<br>002006286 | A2 20020      | 24 WO 2001-US22076                      | 0010713 |  |  |  |
|          | W: AE, AG, AL,         | AM, AT, AU,   | 3, BA, BB, BG, BR, BY, BZ, C            | CH, CN, |  |  |  |
|          | CO, CR, CU,            | CZ, DE, DK,   | 4, DZ, EC, EE, ES, FI, GB, G            | GE, GH, |  |  |  |
|          | GM, HR, HU,            | ID, IL, IN,   | 3, JP, KE, KG, KP, KR, KZ, L            | LK, LR, |  |  |  |
|          | LS, LT, LU,            | LV, MA, MD,   | 3, MK, MN, MW, MX, MZ, NO, N            | PL, PT, |  |  |  |
|          | RO, RU, SD,            | SE, SG, SI,   | C, SL, TJ, TM, TR, TT, TZ, U            | UG, UZ, |  |  |  |
|          | VN, YU, ZA,            | ZW, AM, AZ,   | <pre>     KG, KZ, MD, RU, TJ, TM </pre> |         |  |  |  |
|          | RW: GH, GM, KE,        | LS, MW, MZ,   | ), SL, SZ, TZ, UG, ZW, AT, B            | CH, CY, |  |  |  |
|          | DE, DK, ES,            | FI, FR, GB,   | ₹, IE, IT, LU, MC, NL, PT, S            | TR, BF, |  |  |  |
|          | BJ, CF, CG,            | CI, CM, GA,   | 1, GW, ML, MR, NE, SN, TD, T            |         |  |  |  |
| CA       | 419626                 | AA 20020      | 24 CA 2001-2419626                      | 0010713 |  |  |  |
| US       | 002049208              | A1 20020      | 25 US 2001-905097                       | 0010713 |  |  |  |
| US       | 589952                 | B2 20030      | )8                                      |         |  |  |  |
| EP       | 301511                 | A2 20030      | l6 EP 2001-954675                       | 0010713 |  |  |  |
|          | R: AT, BE, CH,         | DE, DK, ES,   | ₹, GB, GR, IT, LI, LU, NL, S            | MC, PT, |  |  |  |
|          | IE, SI, LT,            | LV, FI, RO, ' | <, CY, AL, TR                           |         |  |  |  |
| JP       | 004532792              | T2 20041      | ?8 JP 2002-512188                       | 0010713 |  |  |  |
| US       | 003220342              | A1 20031      | 27 US 2003-427234                       | 0030501 |  |  |  |
| PRIORIT' | APPLN. INFO.:          |               | US 2000-218339P P                       | 0000714 |  |  |  |
|          |                        |               | US 2001-905097 A1                       | 0010713 |  |  |  |
|          |                        |               | WO 2001-US22076 W                       | 0010713 |  |  |  |
| OTHER SO | RCE(S):                | MARPAT 136:1  | 1786                                    |         |  |  |  |

GI

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\begin{array}{c|c}
R^3 & R^1 \\
N & X - R^2
\end{array}
```

Ι

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The title compds. [I; X = CHR5, NR5, O, S, SOn, a bond n = 0-2; D = CR5
(un)substituted (hetero)a /l; R1 = alkyl, alkenyl, cyc alkyl, etc.; R2 =
alkyl, cycloalkyl; R3 ano ₹4 = H, alkyl, cycloalkyl, e .; R5 = H, alkyl,
cycloalkyl], useful in the treatment of various neurol and
psychol. disorders, e.g., anxiety and depression, treatible by
antagonizing CRF receptor , were prepared E.g., a mul -step synthesis of I
[X = a bond; R1 = CHMeOH; 22 = Et; R3, R4 = H; D = 2,4 :12C6H3], was
given.
ICM C07D487-04
28-17 (Heterocyclic Compc ids (More Than One Hetero At .))
Section cross-reference(s : 1
Antidepressants
Anxiolytics
   (preparation of imidaz [1,2-a] pyrazines for the tre. ment of neurol
   . disorders)
Corticotropin releasing f :tor receptors
RL: BSU (Biological study unclassified); BIOL (Biolog al study)
   (preparation of imidaz [1,2-a] pyrazines for the treement of neurol
   . disorders)
391954-00-0P 391954-03-3P 391954-14-6P
RL: PAC (Pharmacological stivity); RCT (Reactant); SP: (Synthetic
preparation); THU (Therar Itic use); BIOL (Biological udy); PREP
(Preparation); RACT (Reac ant or reagent); USES (Uses)
   (preparation of imidaz [1,2-a] pyrazines for the tre. ment of neurol
   . disorders)
391954-01-1P 391954-02-2F 391954-04-4P
391954-05-5P 391954-06-6P 391954-07-7P
391954-08-8P 391954-09-9P 391954-10-2P
391954-11-3P 391954-12-4P 391954-13-5P
391954-15-7P 391954-16-8P
RL: PAC (Pharmacological ctivity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL ( iological study); PREP (Prep. ation); USES
(Uses)
   (preparation of imidaz [1,2-a] pyrazines for the tree ment of neurol
   . disorders)
107-08-4, 1-Iodopropane
                          123-38-6, Propionaldehyde, rections
                                                                 816-40-0,
1-Bromo-2-butanone 2234 32-4, Propylmagnesium chloric
                                                           4858-85-9,
                     10 10-91-7, Benzyl isocyanide
2,3-Dichloropyrazine
                                                        8716-47-2,
2,4-Dichlorobenzeneboroni acid
RL: RCT (Reactant); RACT Reactant or reagent)
   (preparation of imidaz [1,2-a] pyrazines for the tree ment of neurol
   . disorders)
6863-73-6P 391954-17-9P 3 1954-18-0P
391954-19-1P 391954-20-4P 391954-21-5P
RL: RCT (Reactant); SPN ( /nthetic preparation); PREP
                                                       reparation); RACT
(Reactant or reagent)
   (preparation of imidaz [1,2-a]pyrazines for the treament of neurol
   . disorders)
```

RN 3919: -03-3 CAPLUS
CN Imida p(1,2-a) pyrazine-3-methanol, 3-(2,4-dichlorophenyl)-2-eth; -α-prop; - (9CI) (CA INDEX NAME)

RN 39195 -14-6 CAPLUS CN 1-But none, 1-[8-(2,4-dichlorophen )-2-ethylimidazo[1,2-a]pyra: n-3-yl]-(9CI) (CA INDEX NAME)

```
RN 391954-02-2 CAPLUS CN Imidazo[1,2-a]pyrazine-3-me lanol, 8-(2,4-dichlorophenyl \alpha,2-diethyl- (9CI) (CA INDEX N 4E)
```

RN 391954- 4-4 CAPLUS
CN Imidazc 1,2-a]pyrazine, 8-(2,4-dichi ophenyl)-3-(1-ethoxybutyl)-: ethyl(9CI) CA INDEX NAME)

RN 391954 · 5-5 CAPLUS CN Imidazc 1,2-a]pyrazine-3-methanol, & 2,4-dichlorophenyl)-2-ethyl -1-propy yl- (9CI) (CA INDEX NAME)

RN 391954-6-6 CAPLUS CN Imidazc 1,2-a]pyrazine, 8-(2,4-dichl ophenyl)-3-(1-ethoxybutyl)-2 methyl-(9CI) CA INDEX NAME)

RN 91954-07-7 CAPLUS
CN nidazo[1,2-a]pyrazine-3-meth. ol, 8-(2-chloro-4-methoxyphe /l)-α,2-iethyl- (9CI) (CA INDEX NAM:

RN 31954-08-8 CAPLUS
CN nidazo[1,2-a]pyrazine-3-meth ol, 8-(2-chloro-4-methoxyphe /l)-2-ethyl-propyl- (9CI) (CA INDEX NA!)

RN 91954-09-9 CAPLUS
CN midazo[1,2-a]pyrazine-3-meth; ol, 8-[2-chloro-4-(difluorom; thoxy)phenyl],2-diethyl- (9CI) (CA INDEX AME)

RN 391954-1( ? CAPLUS
CN Imidazo[: 2-a]pyrazine-3-methanol, 8-[ chloro-4-(difluoromethoxy)ph-1yl]2-ethyl-c propyl- (9CI) (CA INDEX NAM.

RN 391954-1: 3 CAPLUS
CN Imidazo[: 2-a]pyrazine, 8-[2-chloro-4- ifluoromethoxy)phenyl]-3-(1-ethoxybut l)-2-ethyl- (9CI) (CA INDEX AME)

RN 391954-12 4 CAPLUS
CN Imidazo[1 2-a]pyrazine, 8-[4-(difluoro thoxy)-2,6-dimethylphenyl]-3 (1-ethoxybut l)-2-ethyl- (9CI) (CA INDEX AME)

RN 
$$39^{-3}54-13-5$$
 CAPLUS CN Implication in the state of the contraction of the contrac

```
RN 391954-16-8 CAPLUS
CN Im: dazo[1,2-a]pyrazin-3-amine, & (2,4-dichlorophenyl)-2-ethyl (phenylmethyl)-N-propyl- (9CI) CA INDEX NAME)
```

IT 391954-17-9 391954-18-0P 391954-19-1P 391954-20-4 391954-21-5P

RL: RCT (Re stant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant ( reagent)

(prepare ion of imidazo[1,2-a]pyrazin for the treatment of neurol

. disorc cs)

RN 391954-17-5 CAPLUS

CN Imidazo[1,2 a]pyrazine, 8-chloro-2-ethyl (9CI) (CA INDEX NAME)

RN 391954-18-( CAPLUS

CN Imidazo[1,: a]pyrazine, 8-(2,4-dichlorop nyl)-2-ethyl- (9CI) (CA INDi.: NAME)

RN 391954-19-3 CAPLUS

CN Imidazo[1,2 ] pyrazine-3-carboxaldehyde, -(2,4-dichlorophenyl)-2-ethy.

(9CI) (CA JDEX NAME)

3919 1-20-4 CAPLUS RN

Imid :0[1,2-a]pyrazin-3-amine, 8- loro-2-ethyl-N-(phenylmethyl (9CI) CN (CA IDEX NAME)

RN 3919 !-21-5 CAPLUS

Imid :o[1,2-a]pyrazin-3-amine, 8- loro-2-ethyl-N-(phenylmethyl N-propyl-CN(CA INDEX NAME)

L57 ANSW  $\stackrel{?}{\sim}$  21 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION JUMBER: 1996:462224 PLUS

125:114694

DOCUMENT лмвек:

TITLE:

Preparation of arylpiperazines as neurokini:

antagonists

INVENTOR ( :

Chiang, Yuan-( ing P.; Finke, Paul E.; Macc ;s,

Malcolm; Meure , Laura C.; Miller, Daniel J Mills, Sander G.; Ro! chaud, Albert J.; Shah, Shre k K.

PATENT AS. [GNEE(S):

Merck and Co.. Inc., USA

SOURCE:

PCT Int. Appl 158 pp.

CODEN: PIXXD2

DOCUMENT ' (PE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. ( JNT: 1 PATENT INFORMATIO

| PA'                    |            | KIND DATE |    |   |             | APPL CATION NO. |     |      |      | DATE |      |                   |          |     |     |     |      |     |
|------------------------|------------|-----------|----|---|-------------|-----------------|-----|------|------|------|------|-------------------|----------|-----|-----|-----|------|-----|
| WO                     | 9610568    |           |    |   | A1 19960411 |                 |     |      |      |      |      |                   | 19950926 |     |     |     |      |     |
|                        | <b>W</b> : | AM,       | 7  | , | BB,         | BG,             | BR, | BY,  | CA,  | CN,  | CZ   | ΞE,               | FI,      | GE, | HU, | IS, | JP,  | KG, |
|                        |            | KR,       | ł  | , | LK,         | LR,             | LT, | LV,  | MD,  | MG,  | MK   | ΛN,               | MX,      | NO, | NZ, | PL, | RO,  | RU, |
|                        |            | SG,       | ?  | , | SK,         | ТJ,             | TM, | TT,  | UA,  | UG,  | US,  | JZ                |          |     |     |     |      |     |
|                        | RW:        | ΚĖ,       | 1  | , | SD,         | SZ,             | ŪĠ, | AT,  | BE,  | CH,  | DE   | ϽK,               | ES,      | FR, | GB, | GR, | ΙE,  | IT, |
|                        |            | LU,       | Ī- | , | NL,         | PT,             | SE, | BF,  | ВJ,  | CF,  | CG , | CI,               | CM,      | GA, | GN, | ML, | MR,  | NE, |
|                        |            | SN,       | Γ. | , | TG          |                 |     |      |      |      |      |                   |          |     |     |     |      |     |
| US                     | 5607       | 936       |    |   |             | Α               |     | 1997 | 0304 | 1    | US : | <del>34 - 1</del> | 3160     | 13  |     | 1   | 9940 | 930 |
| CA                     | 2199       | 621       |    |   |             | AA              |     | 1996 | 0411 | +    | CA : | 95-2              | 2199     | 621 |     | 1   | 9950 | 926 |
| AU                     | 9536       | 429       |    |   |             | A1              |     | 1996 | 0426 |      | AU 1 | 95-3              | 3642     | 9   |     | 1   | 9950 | 926 |
| AU                     | 7028       | 32        |    |   |             | B2              |     | 1999 | 0304 |      |      |                   |          |     |     |     |      |     |
| EP                     | 7834       | 98        |    |   |             | <b>A1</b>       |     | 1997 | 0716 |      | EP ? | 95-               | 9339     | 64  |     | 1   | 9950 | 926 |
|                        | R:         | ΑT,       | ŀ  | , | CH,         | DE,             | DK, | ES,  | FR,  | GB,  | GR,  | ΙE,               | IT,      | LI, | LU, | NL, | PT,  | SE  |
| JP                     | 1050       | 8297      |    |   |             | T2              |     | 1998 | 0818 |      | JP : | 95-               | 5119     | 93  |     | 1   | 9950 | 926 |
| PRIORITY APPLN. IN O.: |            |           |    |   | . :         |                 |     |      |      |      | US 1 |                   |          |     |     |     |      |     |
|                        |            |           |    |   |             |                 |     |      |      |      | WO I | <del>3</del> 5-1  | US12     | 341 | 1   | W 1 | 9950 | 926 |
| OTHER SOURCE(S):       |            |           |    |   |             | MAR             | TAS | 125: | 1146 | 94   |      |                   |          |     |     |     |      |     |

GI

$$R^{8}$$
 $R^{2}$ 
 $R^{9}$ 
 $R^{9}$ 
 $R^{9}$ 
 $R^{9}$ 
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5$ 

```
Title compds. [I; R = (un)substituted (hete o)aryl; R1 = (un)substituted
AB
     alk(en)yl; R2 = null, quaternizing (phenyl) lkyl, O; R8,R9 = H, halo, CF
     alkoxy, etc.] were prepared Thus, (S)-3,5 12C6H3CH(CH2CHO)CH2NMeCOC6H31 2-
     3,5 was reduc ively condensed with N-[2-(ac tylaminomethyl)phenyl]pipera:
     ne to give ti le compound (S)-II. Data for ligand displacement by I from
     NK-1, NK-2, a d NK-3 receptors in vitro wer given.
IC
     ICM C07D295- 5
     ICS C07D403- 4; A61K031-495
     28-17 (Hetera yalia Compounds (More Than On Hetero Atom))
CC
     Section cross reference(s): 1
ST
     arylpiperazir prepn neurokinin antagonist
IT
     Respiratory t act
        (disease, reatment; preparation of aryl iperazines as neurokinin
        antagonist )
IT
     33507-63-0, S bstance P
                               86933-74-6, Neurokinin A
     RL: BPR (Biol gical process); BSU (Biologic & study, unclassified); BIOL
     (Biological & Jdy); PROC (Process)
```

```
(me ated diseases; treatment; p: paration of arylpiperazines . .
       IT
     179245 -6-0P
                   179249-57-1P
                                  17924 · 58-2P
                                                 179249-59-3P
                                                               17924
                                                                      60-6P
    179249 1-7P
                                  17924: 63-9P
                                                                      65-1P
                   179249-62-8P
                                                179249-64-0P
                                                               17924
    179249 6-2P
                   179249-67-3P
                                  17924 · 68-4P
                                                179249-69-5P
                                                               17924
                                                                      70-8P
                                                               17924 75-3P
    179249 '1-9P
                   179249-72-0P
                                  17924 73-1P
                                                179249-74-2P
                                  17924° 78-6P
    179249 '6-4P
                                                179249-79-7P
                   179249-77-5P
    179249 (0-0P
                                  17924 · 82-2P
                   179249-81-1P
                                                179249-83-3P
                                                               17924
                                                                      84-4P
    179249 !5-5P
                                  17924 · 87-7P
                                                179249-88-8P
                   179249-86-6P
                                                               17924 89-9P
    179249 →0-2P
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                   179249-91-3P
                                                179249-93-5P
                                                                     94-6P
                                                               17924
                                                               17924' 99-1P
    179249 →5-7P
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    179250 5-8P
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                                  17946" 16-8P
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                                                 179465-17-9P
                                  179465 21~5P
    179465 .9-1P
                   179465-20-4P
                                                 179465-22-6P
    RL: BA (Biological activity or effector, except adverse); BSU (B ological
    study, inclassified); SPN (Synthetic preparation); THU (Therapeut use);
    BIOL (..ological study); PREP (Preparation); USES (Uses)
        (preparation of arylpiperazines as neurokinin antagonists)
IT
    288-32 , Imidazole, reactions 39 47-8, 2-Fluorobenzonitrile
    446-52 , 2-Fluorobenzaldehyde 499 06-9, 3,5-Dimethylbenzoic ac 1
    725-89 , 3,5-Bis(trifluoromethyl)benzoic acid
                                                    2905-62-6,
     3,5-Di lorobenzoyl chloride 1305: 77-0, 8-Chloro-1,7-naphthyric ne
    39512-
           -1, 1-(2-Methylphenyl)piperamine 52341-91-0
                                                           57260-71-
    tert-E yl piperazine-1-carboxylate 74803-32-0 84400-99-7,
    7-Chlc furo[2,3-c]pyridine 90719 2-7, (S)-4-Benzyl-2-oxazolid one
    117299 2-4
                                147643-17-0
                  121371-44-6
                                            161622-05-5,
    3-Fluo →-5-trifluoromethylbenzoic ac:d
                                             179250-62-5 179250-63-6
    179250 4-7
                  179250-65-8 179250-65-9
           (Reactant); RACT (Reactant ( reagent)
    RL: RC
        (preparation of arylpiperazines as neurokinin antagonists)
    59215- <-2P
TT
                  164329-19-5P 164329 1-9P
                                               167484-59-5P
                                                              167485 3-4P
    174855 3-9P
                                                               17925: 25-0P
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                   179250-52-3P
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                                                 179250-54-5P
                                                               17925( 55-6P
                   179250-57-8P
    179250 -6-7P
                                  179256 58-9P
                                                179250-59-0P
                                                               17925( 60-3P
    179250 11-4P
    RL: RC (Reactant); SPN (Synthetic preparation); PREP (Preparation; RACT
     (React, it or reagent)
        (preparation of arylpiperazines as neurokinin antagonists)
    179249 '6-4P
IT
    RL: BA' (Biological activity or effector, except adverse); BSU (B: logical
    study, inclassified); SPN (Synthetic preparation); THU (Therapeut: use);
    BIOL (: ological study); PREP (Preparation); USES (Uses)
        (preparation of arylpiperazines as neurokinin antagonists)
    179249 '6-4 CAPLUS
RN
    Benzam le, N-[(2S)-2-(3,4-dichlorophenyl)-4-[4-(6-methylimidazo[1, -
CN
    a]pyra: n-8-yl)-1-piperazinyl]butyl] N,3,5-trimethyl- (9CI) (CA ] |DEX
    NAME)
```

Absolute stereochemistry.

CAPLUS COPYRIGHT 2006 ACS O STN L57 ANSWER 22 OF 22

1988:631072 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 109:231072

TITLE: 8-Alkylaminoimidazo[1,2-a yrazine derivatives, their

preparation, and their ap ication in therapy

INVENTOR(S): Sablayrolles, Claire; Bon t, Pierre Antoine; Cros,

Gerard; Chapat, Jean Pier ; Boucard, Maurice

PATENT ASSIGNEE(S): Byk-Gulden Lomberg Chemis 'e Fabrik G.m.b.H., Fed.

Rep. Ger.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COU ':

PATENT INFORMATION:

| PA'              | rent : | NO.  |      |     | KINI | D DATE       | APPLIC.    | 'ION NO.   |   | DATE     |
|------------------|--------|------|------|-----|------|--------------|------------|------------|---|----------|
|                  |        |      |      |     |      |              |            |            | - |          |
| WO               | 8804   | 298  |      |     | A1   | 19880616     | WO 198     | EP756      |   | 19871204 |
|                  | W:     | JP,  | US   |     |      |              |            |            |   |          |
|                  | RW:    | AT,  | BE,  | Ή,  | DE,  | FR, GB, IT,  | LU, NL, S: |            |   |          |
| FR               | 2607   | 813  |      |     | A1   | 19880610     | FR 198     | 17164      |   | 19861205 |
| FR               | 2607   | 813  |      |     | B1   | 19890331     |            |            |   |          |
| EP               | 3483   | 92   |      |     | A1   | 19900103     | EP 198     | 900690     |   | 19871204 |
|                  | R:     | AT,  | BE,  | ΞН, | DE,  | FR, GB, IT,  | LI, LU, N  | SE         |   |          |
| JP               | 0250   | 1575 |      |     | T2   | 19900531     | JP 198     | 500907     |   | 19871204 |
| US               | 5028   | 605  |      |     | Α    | 19910702     | US 198     | 364428     |   | 19890602 |
| PRIORITY         | Y APP  | LN.  | INFO |     |      |              | FR 198     | 17164      | Α | 19861205 |
|                  |        |      |      |     |      |              | WO 198     | EP756      | W | 19871204 |
| OTHER SOURCE(S): |        |      |      |     |      | REACT 109:23 | 1072; MARP | 109:231072 |   |          |

GI

```
NR<sup>3</sup>R<sup>4</sup>
N
N
R
1
Y
Z
1
```

```
AB
     The titl compds. [I; R1, R2 = H, CF3, NO, NO2, cyano, halo, C1-5 all 1,
     alkoxyca ponyl, (substituted) Ph, carl moyl, cycloalkyl, acyl, alkyl hio;
    R1R2 = (1-12)4; R3, R4 = H; (substitute i) C1-5 alkyl, acyl, furfuryl: R3R4
     = (CH2)5 CH2CH2OCH2CH2, CH2CH2SCH2CH1: Y, Z = H, halo, CO2H, cyano, C1-5
     alkyl, a coxy, CF3, amino] and their pharmaceutically compatible sals
     were presered as antispasmodics, utershe relaxants, bronchodilators, cardiac
     analepti ;, and neurosedatives. Imide 20[1,2-a] pyrazine (preparation
     from ami pyrazine, given), in HOAc was treated with Br in HOAc and he
     product .5-dibromoimidazo[1,2-a]pyrazine was stirred with aqueous N NH2 to
     give 3-b >mo-8-methylaminoimidazo[1,2 1]pyrazine. I had ED50's 13-4
     times gratter than theophylline (II) for antispasmodic activity in a t
     duodenum
IC
     ICM C07' 187-04
     ICS A61. )31-495
ICI
    C07D487- +, C07D241-00, C07D235-00
     28-17 (H::erocyclic Compounds (More Than One Hetero Atom))
             oss-reference(s): 1
     Section
IT
     117617-7 -9P
             Synthetic preparation); FORM (Formation, nonpreparative); | EP
     RL: SPN
     (Prepara .on)
        (formation of, in preparation of daig)
IT
     63744-22 3P
     RL: RCT
             ?eactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactan or reagent)
        (preparation and amination of)
IT
     87597-34 · )P
             Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     RL: RCT
     (Reactan or reagent)
        (preparation and amination of, in preparation of drug)
IT
     117702-86-0P 117718-73-7P 117718-74-8P
     117718-7 9P
                    117718-76-0P
                                   117718-77-1P
                                                                  117718-: -3P
                                                  117718-78-2P
     117718-8( -6P
                    117718-81-7P
                                   117718-82-8P
                                                  117718-83-9P
     117718-8- OP
                    117718-85-1P
                                   117718-65-2P
                                                  117718-87-3P
                                                                  117718-E -4P,
     Imidazo[ .2-a]pyrazin-8-amine
                                     117718 ·89-5P
                                                    117718-90-8P
     117718-92-9P
                    117718-92-0P 117718-93-1P
                                                117718-94-2P
     117718-9: ·3P
                    117718-96-4P 117718-97-5P
                                                117718-98-6P
     117718-9 -7P
                    117719-00-3P 117719-01-4P 117719-02-5P
     117719-0. ·6P
                    117719-04-7P
                                   117719-(5-8P
                                                  117719-06-9P
                                                                  117719-( -0P
    117719-0: ·1P
                    117736-91-1P 117736-92-2P
                                                117736-93-3P
    RL: BAC 3iological activity or effector, except adverse); BSU (Bio) gical
     study, usplassified); SPN (Synthetic preparation); THU (Therapeutic se);
    BIOL (Biclogical study); PREP (Preparation); USES (Uses)
        (preparation of, as drug)
IT
    274-79-31. Imidazo[1,2-a]pyrazine
                                         55 535-63-7P
     63744-24 · LP 77112-52-8P 87597-29-3P
    87597-32-3P
                   89641-34-9P, 2-Amino-5-k como-3-dimethylaminopyrazine
    117718-99-1P 117719-09-2P 117719-19-4P
    RL: SPN Synthetic preparation); PREP (Preparation)
```

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as drug intermediate)
        (preparation o
                                      14399-37-2, 2 mino-3,6-dichloropyrazine
IT
     13134-31-1, 2,3-D
                        minopyrazine
     55635-63-7, 2-Ami
                        -5-bromo-3-methylaminopyrazi · 84996-40-7
     87597-21-5
                 8912
                        58-0, 2,3-Diamino-5-bromopyr ine
                                                            90674-84-3,
     2-Amino-5-bromo-3
                        iperidylpyrazine
                                           117719-10 , 2-Amino-5-bromo-3-
     ethylaminopyrazin-
                          117719-11-6, 2-Amino-3-pro: laminopyrazine
     117719-12-7, 2-Am
                        o-5-bromo-3-propylaminopyraz e
                                                         117719-13-8,
     2-Amino-5-bromo-3
                        utylaminopyrazine
                                            117719-1 9, 2-Amino-5-bromo-3-sec-
    butylaminopyrazin
                          117719-15-0, 2-Amino-3-pip idylpyrazine
     117719-16-1, 2-Am
                        o-3-morpholinylpyrazine
                                                 11 19-17-2,
     2-Amino-5-bromo-3
                        orpholinylpyrazine
                                             117719-
                                                     - 3
     RL: RCT (Reactant
                        RACT (Reactant or reagent)
        (reaction of,
                        preparation of drug)
IT
     117617-73-9P
     RL: SPN (Syntheti preparation); FORM (Formatio nonpreparative); PREP
     (Preparation)
        (formation of,
                        n preparation of drug)
RN
     117617-73-9 CAPL
     Imidazo[1,2-a]pyr. ine-2-carboxylic acid, trich.oro-, ethyl ester (9CI)
CN
     (CA INDEX NAME)
```

3 (D1-C1)

IT 63744-22-9P

RN

RN

CN

SPN (Synthetic preparation) PREP (Preparation); RACT RL: RCT (Reactant (Reactant or reaget) (preparation a: amination of) 63744-22-9 CAPLU:

CN

Imidazo[1,2-a]pyr ine, 6,8-dibromo- (9CI) (CA NDEX NAME)

IT 87597-34-0P

> RL: RCT (Reactant SPN (Synthetic preparation) PREP (Preparation); RACT (Reactant or reage t) (preparation a: amination of, in preparatio: of drug) 87597-34-0 CAPLU: Imidazo[1,2-a]pyr ine-2-carboxylic acid, 3,5,6 --tetrachloro-, ethyl ester (9CI) (CA DEX NAME)

IT 117702-86-117718-73-7P 117718-74-8P 117718-80-117718-91-9P 117718-93-1P 117718-97-117719-01-4P 117719-02-5P 117736-92-RL: BAC (B logical activity or effector except adverse); BSU (Biolog cal study, unc ssified); SPN (Synthetic pre :ration); THU (Therapeutic us ); ical study); PREP (Preparati :); USES (Uses) BIOL (Biol (prepar. ion of, as drug) RN 117702-86-CAPLUS Imidazo[1, a]pyrazin-8-amine, 6-bromo-2 chloromethyl)-N,N-dimethyl-CN (9CI) (CA NDEX NAME)

RN 117718-74- CAPLUS
CN Imidazo[1, a]pyrazine-2-carboxylic acid 6-bromo-8-(4-morpholinyl)-, ethyl este (9CI) (CA INDEX NAME)

RN 117718-80-6 CAPLUS

CN Imidazo[1,2-a]pyraz e, 3,6-dibromo-8-(1-piperidi /1)- (9CI) (CA INDEX NAME)

RN 117718-91-9 CAPLUS

CN Imidazo[1,2-a]pyraz e, 8-(4-morpholinyl) - (9CI) 'CA INDEX NAME)

RN 117718-93-1 CAPLUS

CN Imidazo[1,2-a]pyraz. e, 6-bromo-8-(4-morpholinyl) (9CI) (CA INDEX NAME)

RN 117718-97-5 CAPLUS

CN Imidazo[1,2-a]pyraz: e, 3,6-dibromo-8-(4-morpholi 1)- (9CI) (CA INDEX

NAME)

RN 117719-01-4 APLUS

CN Imidazo[1,2-: pyrazine-2-carboxylic acid, > (1-piperidinyl)-, ethyl este (9CI) (CA II EX NAME)

RN 117719-02-5 APLUS

CN Imidazo[1,2- $\epsilon$  pyrazine-2-carboxylic acid,  $\epsilon$  (4-morpholinyl)-, ethyl esterostic (9CI) (CA II EX NAME)

RN 117736-92-2 APLUS

CN Imidazo[1,2-a pyrazine-2-carbonitrile, 6-b) mo-8-(4-morpholinyl) (9CI) (CA INDEX NAM )

IT 274-79-3P, Imidazo[1,2 1]pyrazine 63744-24-1P

77112-52-8P 87597-29-3 87597-32-8P 117718-93-1P 117719-09 2P 117719-19-4P

RL: SPN (Synthetic pre ration); PREP (Preparation)

(preparation of, as drug intermediate)

RN 274-79-3 CAPLUS

CN Imidazo[1,2-a]pyrazin∈ (8CI, 9CI) (CA INDEX NAME)

RN 63744-24-1 CAPLUS

CN Imidazo[1,2-a]pyrazin∈ 3,6,8-tribromo- (9CI) (CA DEX NAME)

RN 77112-52-8 CAPLUS

CN Imidazo[1,2-a]pyrazine :-carboxylic acid, ethyl est: (9CI) (CA INDEX NAME)

RN 87597-29-3 CAPLUS

CN Imidazo[1,2-a]pyrazine ?-carboxamide, 6,8-dibromo- CI) (CA INDEX NAME)

RN 87597-32-8 CAF US

CN Imidazo[1,2-a]r razine-2-carbonitrile, 6,8-di romo- (9CI) (CA INDEX NAME)

RN 117718-93-1 CA LUS

CN Imidazo[1,2-a]p razine, 6-bromo-8-(4-morphol: yl)- (9CI) (CA INDEX NAME)

RN 117719-09-2 CA LUS

CN Imidazo[1,2-a]p razine, 6,8-dibromo-2-phenyl- (9CI) (CA INDEX NAME)

RN 117719-19-4 CA LUS

CN Imidazo[1,2-a]p razine, 5,8-dichloro- (9CI) CA INDEX NAME)

T 87597-21-5

RL: RCT (Reactant); RACT Reactant or reagent) (reaction of, in prep ation of drug)

N 87597-21-5 CAPLUS

N Imidazo[1,2-a]pyrazine-2 arboxylic acid, 6,8-dibromo ethyl ester (9CI) (CA INDEX NAME)